Volume 165 No. 20

Oil, Paint and Drug Reporter

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May 17 1954

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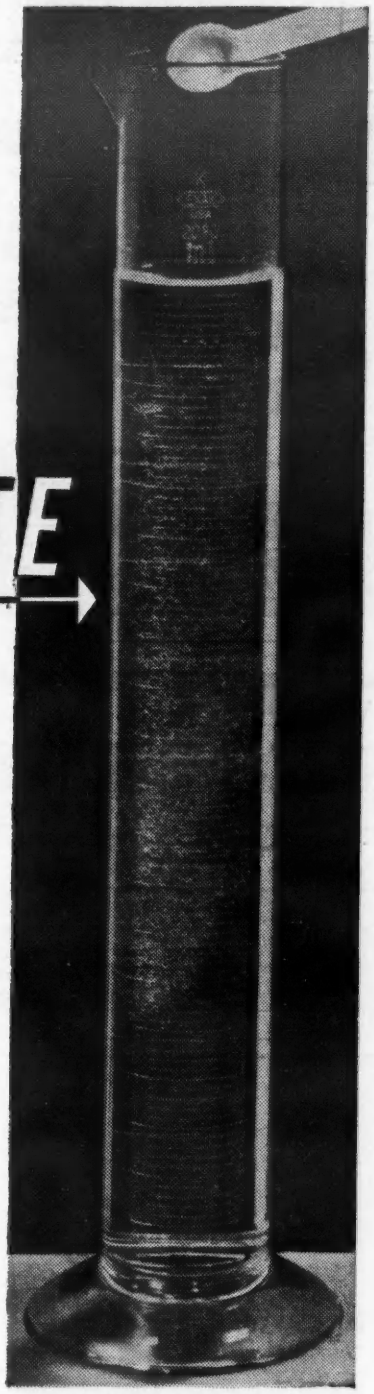

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Oil, Paint and Drug Reporter

Volume 165 No. 20 — 30 Church Street, New York 7, N. Y. — May 17, 1954

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Pesticide Supply Seen Below Epidemic Needs

The Department of Agriculture reminded farmers and pesticidal formulators last week that a sudden epidemic of pest infestation in the farm belt might find supplies of the bug killers on hand inadequate to cope with the situation unless orders for new supplies are stepped up.

The department said that "the overall supply of insecticides, fungicides, and weed killers for domestic use in the 1954 season is fairly large, and ample capacity exists for the production of all anticipated requirements of major items. Ordering for use in the coming season has generally been slow so manufacturers of pesticidal chemicals have not been inclined to increase production as much during the months just past as in previous winters. This situation may affect distribution in case of epidemic infestations.

Unpredictability of Nature Cited

"Insect infestations and fungus infections are to a large extent dependent on weather conditions and other natural factors, few of which are predictable to any satisfactory degree. If serious epidemics should become widespread, large tonnages of pesticidal formulations would be needed promptly to avoid heavy losses by growers. A striking example is in the cotton belt where, with favorable rainfall in June and July, boll weevil populations might increase quickly to enormous numbers. Growers may find their sources of supply exhausted if bad outbreaks should occur. This situation would be serious where formulators have bought only enough stocks to meet current needs."

The department's comments were contained in a report on the pesticide situation for 1953-54, prepared by H. H. Shepard of the Commodity Stabilization

—*Continued on page 86*

Chemical Exports Fell Off, Imports Climbed in March

March exports of chemicals and related products from the United States declined from the levels of February while imports increased over the same period, according to preliminary estimates issued last week by the Bureau of Census.

Exports were estimated at $66,700,000 during the month, which compared with $73,200,000 for February. Imports on the other hand rose from $23,000,000 in February to $26,000,000 in March. The bureau said that the decline in exports reflected small decreases in many of the individual commodities rather than a heavy decline in a single commodity.

The bureau reported that exports of all merchandise declined from $1,181,400,000 in February to $1,121,800,000 in March, a level about 15 percent below the 1953 monthly average of $1,313,700,000. These figures are subject to revision later be-

—*Continued on page 73*

Petroleum Companies Get Rapid Write-Off Certificates

Certificates of necessity for accelerated tax amortization for sixty-nine new or expanded facilities involving investments totaling $53,488,774 were issued during the period April 22 through May 5 by the Office of Defense Mobilization.

The three largest certificates announced were Texas Company, Port Arthur, Tex., for petroleum refining facilities costing $11,400,000 with 65 percent allowed for accelerated tax amortization on $7,250,000 and 45 percent allowed on $4,150,000; Ann Arbor Railroad Company, St. Louis, Mo., transportation facilities, $6,000,000 with 50 percent allowed; and Aurora Gasoline Company, Detroit, Mich., petroleum refining facilities, $5,365,000 with 65 percent allowed on $4,295,000, 45 percent allowed on $755,000 and 15 percent allowed on $315,000.

Naphtha Export Curbs Eased

Exports of naphtha in containers of four ounces or less are no longer required to be covered by validated licenses unless being shipped to group "R" destinations. In an amendment to the export control regulations effective May 6, the Bureau of Foreign Commerce limited the validated license requirement to the Communist-dominated areas, and then only in the case of shipments valued at $300 or more.

Anti-Pollution Equipment Tax Incentives Are Asked

A proposal to reduce stream pollution by providing tax incentives for industrial firms to install anti-pollution equipment was sent to congress last week by the Chamber of Commerce of the United States.

In a letter to Sen. Eugene D. Millikin, chairman of the senate finance committee, the chamber recommended amendment of the tax reform bill (H. R. 8300) to permit firms to write off the cost of such equipment over a five-year period for tax purposes. Present law requires that tax deductions for depreciation be made over the normal lifetime of the equipment.

Copper Tariff Suspension Extension Voted by House

The house voted last week to continue the suspension of import duties on foreign copper entertaining the United States for another two years until June 30, 1956, under the same conditions as have been effect for the past several years. H. R. 7709 providing for the suspension now goes to the senate for concurrent approval.

Imports of copper have been tax free since 1940 except for a few months in 1950-51, and will continue for another two years unless the price of copper should fall below 24 cents per pound for a period of a month. In such an event the Tariff Commission is required to report this fact to the President who is required to revoke the import tax suspension within twenty days.

The house was told that statistics for 1953 on unmanufactured copper consumption, production, and net United States imports—imports minus exports—indicate that consumption was 1,840,000 short tons; production was 1,366,000 short tons, and net imports were 555,000 short tons.

Menthol Import Regulations On French Goods Relaxed

Importations of synthetic menthol from France, under licensing procedures providing assurances that the material is not of Red China origin, was authorized last week by the Foreign Assets Control Division of the Treasury Department.

The agency said that arrangements have been made whereby customs collectors will honor certificates of origin of the Direction des Industries Chimiques of the French government, covering synthetic menthol from France. Where persons have obtained the certificates from the French government the Foreign Assets Control Division will issue licenses specifically for the purchase and importation of the product into the United States.

Previously, the control regulations have barred the importation of either natural or synthetic menthol from all areas except Brazil and Japan. The synthetic was included in the ban because of the difficulty in distinguishing it from the natural.

Toilet Goods Trade Inquiry Is Now Under Way by FTC

The Federal Trade Commission is undertaking an immediate investigation to determine whether the cosmetic industry is living up to the trade practice rules worked out with FTC, Edward F. Howrey, chairman of the commission, revealed last week.

Speaking at the annual meeting of the Toilet Goods Association in New York last week, Mr. Howrey disclosed that he has ordered an inquiry looking into the pricing practices and promotional allowances of cosmetic manufacturers in selected trade areas. The investigation is a further step, he said, in a cooperative program aimed at bringing about prompt compliance with the rules.

"We want to learn, first, whether the sales plans reported to us are actually in effect, and second, to find out what that effect is," the FTC head explained. He said that it is the commission's "firm intent to obtain substantial compliance with these rules—preferably, of course, voluntary compliance." But if necessary, he added, "all the compulsory procedures available to the commision will be promptly applied and pressed."

"When this spot investigation has been completed," Mr. Howrey continued, "the commission will have the whole picture. It can then decide whether the trade practice rules have done the job or whether it must proceed on a wholesale case-by-case basis involving formal complaints. If the rules do not work, you can rest assured 'with all the hay that is down,' the commission will be compelled to promptly invoke its compulsory procedures. However, the fact that a few hard-core violations may turn up, requiring formal complaints, will not be enough to discredit the rules as a whole. One of the purposes of trade practice rules is to ferret out and pinpoint the willful violator."

A fuller account of Mr. Howrey's address appears in the special TGA convention report, which starts on page 45 of this issue.

Antibiotic Drug Rules Are Amended by FDA

The Food and Drug Administration last week announced several amendments to its regulations affecting the testing and certification of antibiotic drugs.

The amendments related to the testing of tetracycline hydrochloride ointment and extended the potency date for penicillin-streptomycin-bacitracin dental paste to eighteen months, and the potency date of streptomycin otic with antifungal agent to thirty-six months. In other amendments to the regulations, the agency broadened the exemption of animal feeds containing antibiotics from the requirement that they be certified to include feeds used for prevention or treatment of swine enteritis, and control of low-grade bacterial enteritis in mink.

Flavoring Makers Must Give Secret Formulas

A change in enforcement policy that will require suppliers of flavoring compounds to disclose their formulas to drug manufacturers seeking the right to market new drugs in which these compounds are among the ingredients has been put into effect by the Food and Drug Administration. An official statement of policy in the matter is to be announced soon.

The new requirement is understood to have been protested strongly by essential oil and flavoring manufacturers because these formulas often are of value only because their ingredients or methods of manufacture are unknown to competitors. The formulations of some of the flavoring compounds are among the most closely guarded secrets of the industry.

Manufacturer's Responsibility Cited

FDA believes, however, that the ingredients in flavoring compounds must be made known to the new drug manufacturers because the drug manufacturer is responsible by law for the safety of his product. FDA's requirement, however, does not extend to disclosure of the formula to persons other than the drug manufacturer who plans to incorporate it in his new drug.

The American Drug Manufacturers' Association in informing its members of the new requirement, said that in some instances the requirement has been met by incorporating in the new drug applications statements on quantities and ingredients of flavors. In some instances the company compounding the flavoring material has furnished the required information to the new drug branch upon request, and the firm filing the new drug application has made reference in the application to this fact.

Either Procedure Acceptable

ADMA understands that at present either procedure is acceptable to FDA. However, it is also understood, that FDA officials do not intend to withhold pertinent information received from suppliers on flavoring mixtures from firms using the particular mixtures in their drug products. The pharmaceutical producer must, of course, request the information from FDA based upon the use of the mixtures in a drug for which the company is responsible. Any agreement to keep the formulas confidential is a matter for the supplier and his customer, it was stated, and FDA officials have indicated that they do not wish to be a party to it.

Senate Urged to Vote Funds For Broader Fats, Oils Data

The senate was urged last week to provide funds to the Bureau of Census enabling it to broaden the scope of its monthly fats and oils reports to include coverage of the use of animal and vegetable oils and fats in livestock feeds. The request was made to a subcommittee of the senate appropriations committee now considering the annual appropriation bill for the agency.

John B. Gordon, secretary ot the Bureau of Raw Materials for American Vegetable Oils and Fats Industries, described the failure of census to cover this area in the use of fats and oils as "an important gap" in the publication of its statistics which has grown up in the past year and particularly in the last few months. He said it has been estimated by some that more than 250,000,000 pounds of animal and vegetable oils and fats are now being used per annum in mixed feeds, and within another year this figure will be immensely larger. Guesses as to maximum potential use in the future range up to 1,600,000 tons a year, or more than total domestic production, he added.

"The chief domestic users of inedible tallows and greases are soap makers, manufacturers of lubricants, sulphonators and fat splitters," Mr. Gordon continued. "Production and marketing schedules for these products must be planned well in advance of manufacturing operations. Such plans can be made only in light of full knowledge of the availability of the necessary tallow and grease supplies. With the rapidly increasing use of these supplies in fat fortifying of mixed feeds, manufacturers will be increasingly obliged to guess when estimating available supplies and such guess work is an expensive burden on the entire economy."

FTC Revamps Proceedings Setup

The Federal Trade Commission last week adopted a number of reforms to its proceedings designed to provide defendants in cases before the commission with more clear-cut interpretations of the antitrust laws under its administration. The reforms are based on recommendations made early last month by Edward F. Howrey, chairman. They cover the following points:—

Major Points of New Procedure

"1. The hearing examiner should issue findings and conclusions and his reasons therefor in every case, whether they be favorable or adverse to the allegations of the complaint. He should abandon formal and legalistic 'findings' and adopt instead narrative and descriptive reports.

"2. The form and content of the order to cease and desist, which is part of the initial decision, should be improved.

"The prohibitions of the order should deal with the specific issues and should be so clear that respondents will have no doubt as to what is expected of them. The exact practice found to be illegal should be expressly prohibited, as well as such other practices as may be necessary to assure adequate relief.

"3. Except in rare cases, the commission, on review or appeal, should not issue new or separate findings.

"Where the commission disagrees with some of the findings in the initial decision, it is the purpose of an opinion to point that out, to explain why the commission differs, and to order the findings modified accordingly. Since the commission, under the statute, has the ultimate fact finding responsibility, the opinion should, of course, expressly adopt the findings and conclusions of the hearing examiner as modified.

"4. The commission should write an opinion in every case."

Howrey's Comments

In commenting on these proposals, chairman Howrey said it was "manifestly wrong" for the commission to make formal findings "only in those cases in which the decision supported the charges of the complaint."

"If charges have been made which prove to be erroneous," he said, "the re-

—*Continued on page 86*

Interhandel Again Bids For Gen'l Aniline Trial

Interhandel, a Swiss holding company, claiming lawful ownership of General Aniline & Film Corporation, New York, which the government seized during World War II, last week asked the United States Court of Appeals for the District of Columbia to order the company's suit for recovery of the chemical company to be tried on its merits by the lower court.

In a brief to the appeals court, the Swiss firm charged that Chief Justice Bolitha Laws of the lower federal court denied the corporation its constitutional rights of due process in dismissing the recovery suit when it failed to produce certain documents demanded by the government. The Swiss government refused to permit delivery of the documents on the ground that it would violate Swiss secrecy laws.

Interhandel Filed in 1948

General Aniline was seized at the outbreak of the war by the Alien Property Custodian as being an enemy-owned property. After administrative efforts to recover the company had been exhausted, Interhandel filed suit in 1948 against the government demanding return of the property on the grounds that Interhandel was at all times a non-enemy, friendly neutral.

The government, however, countered the suit with a denial of Interhandel's claim that it was not enemy-dominated, stating that it had evidence to the contrary and demanded that the Swiss firm produce records in the possession of H. Sturzenegger & Cie., a Swiss bank. The government claimed that control over the bank and Interhandel was practically identical and that, furthermore, it was within Interhandel's power to prevail on the Swiss government to waive secrecy laws.

The appeals court was told by Interhandel that Judge Laws erred in dismissing the complaint because he acted on the company's failure to comply with an order

—*Continued on page 86*

Rubber-Use Chemicals Output, Sales Up in '53

United States production of rubber-processing chemicals in 1953 was 145,000,000 pounds, an increase of 14 percent over the 127,000,000 pounds reported for 1952, according to preliminary statistics released last week by the Tariff Commission. Sales totaled 103,000,000 pounds, valued at $60,000,000, compared with 94,000,000 pounds, valued at $54,000,000 in 1952. The larger 1953 production and sales resulted from an increase in the consumption of rubber.

The output in 1953 of cyclic rubber-processing chemicals totaled 122,000,000 pounds, compared with 108,000,000 pounds in 1952. Sales of these compounds in 1953 were 85,000,000 pounds, valued at $48,000,000, compared with 78,000,000 pounds valued at $42,000,000, in the previous year. Cyclic rubber-processing chemicals are chiefly accelerators and antioxidants.

The production in 1953 of acyclic rubber-processing chemicals, chiefly accelerators and peptizers, was 23,000,000 pounds, compared with 19,000,000 pounds produced in 1952. Sales in 1953 totaled 18,000,000 pounds, valued at $12,000,000, compared with 17,000,000 pounds, valued at slightly less than $12,000,000, in 1952.

Alumina Plant of Alcoa Now Running Two Units

The new chemical products plant of Aluminum Company of America in Bauxite, Ark., is 50 percent complete, with two of the four production units now running. Operation of the second production unit of the plant began today, coincident with the opening of national chemical progress week, sponsored by Manufacturing Chemists' Association.

The newly-operating chemical products plant unit will produce specially-calcined aluminas. Alumina hydrate ($Al_2O_3 \cdot 3H_2O$), the basic material used, is procured from the adjacent alumina refining plant. Some of the alumina is shipped to customers from bulk storage. The remainder will be processed further in the third plant unit, scheduled for first operation about June 1.

Linseed Oil Sold at 7 Cents

The Commodity Credit Corporation last week sold an additional 33,600,000 pounds of raw linseed oil for export under recently announced sales offers. The oil was sold in a single sale at 7 cents per pound "on a delivery-in-store basis for export to friendly countries."

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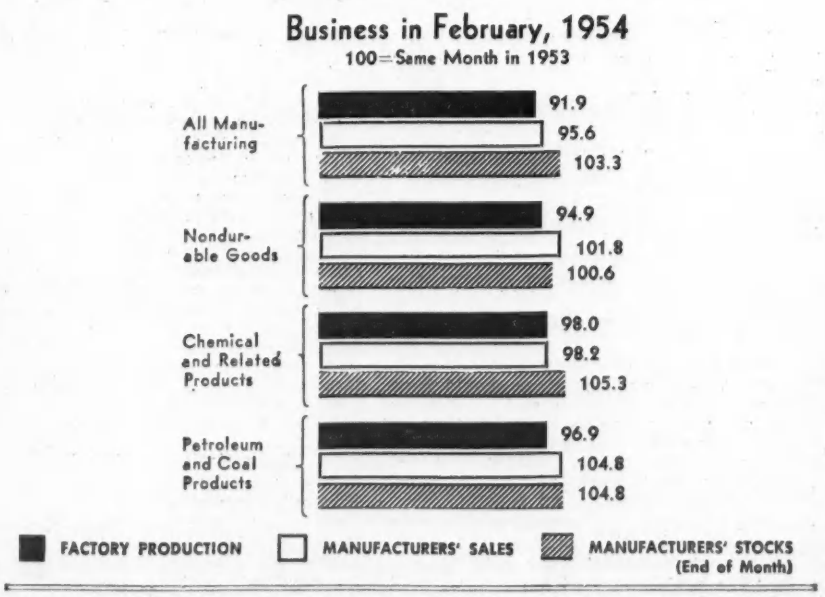
Sumner Has Technical Para-Aminosalicylic Acid

Sumner Chemical Company, New York, long a producer of USP sodium p-aminosalicylate, is now offering technical p-aminosalicylic acid. The acid reportedly has a quite limited solubility in water, around 0.1 percent. However, it is said to be quite soluble in alcohol, in dilute nitric acid and in dilute alkalies. Technical p-aminosalicylic acid is suggested as a specialty reducing agent in soldering or brazing fluxes.

Priced at $3.50 per pound in 100-pound Fiberpak drums, the material is sold f.o.b. Zeeland, Mich., freight allowed to destinations east of Denver, Col. According to Sumner, the $3.50 quotation is an introductory price, and if volume applications can be developed, a reduction is a virtual certainty.

Witco Rubber Chemicals Division Post to Brubaker

Witco Chemical Company, New York, has elected Harry M. Brubaker vice-president in charge of the newly-created Witco Rubber Chemicals Division. Mr. Brubaker, who joined Witco in 1951 as assistant sales manager of the carbon black division, had earlier affiliations with B. F. Goodrich Company, Phillips Chemical Company, and Sid Richardson Carbon Company. Headquarters of the new division will be in Akron, Ohio. It will cooperate with Witco's eleven sales offices and will be responsible nationally for sales to the rubber industry of Witco-made carbon black, "Sunolite" antisunchecking wax, "M. R." hard hydrocarbon and softeners.



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Price Index Down Again

The overall OPD price index fell for the second week in a row, moving down 1.03 point to reach 108.34. In the organic chemicals market, crude glycerine prices continued to show a firm tone due to scarcity of supplies. Current prices for soaplye and saponification material were up a cent. Methyl acetone schedules were reduced in this market. Mercury continued its advance in the heavy chemicals group. Tin straits were also advanced. There were no reductions in this section. The agricultural chemicals market was without price changes.

Argentine casein was raised among protective coating materials. Copper naphthenate, as well as superfine and TN grades of shellac, were also raised in this section, while no reductions were noted. The oils, fats and waxes group featured a continued decline by oil meals. In addition, copra, greases, tallow and yellow wax dropped. Advances were noted for lard and ouricury wax, together with cottonseed and tung oils. The coal chemicalas market was without price variation.

An extensive number of essential oils proved weaker during the week, including angelica, calamus, clove, coriander, cumin, Canadian fir, California and Messina lemon and rue. The essential oils, aromatics and flavorings market witnessed advances for Ceylon cinnamon and West Indian nutmeg. Flavoring materials lowered included Dutch caraway, African ginger, Jamaican pimento and poppy seed. Textile and leather chemicals were unchanged in price, as were petroleum derivatives.

Prices Advanced

Casein, Argentine, 1c. per lb. (76).
Cinnanmon, Ceylon, No. 2, 2c. per lb. (59).
Cocoa butter, 8c. per lb. (79).
Copper naphthenate, 2c. per lb. (76).
Glycerine, nat., crude, saponification, 88%, 1c. per lb. (63).
soaplye, 80%, 1c. per lb.
Lard, ¾c. per lb. (79).
Mercury, $13 per flask (36).
Nutmeg, West Indian, ½c. per lb. (59).
Oil, coconut, crude, ⅛c. per lb. (79).
Cottonseed, crude, ⅛c. per lb. (79).
ref., ⅛c. per lb.
Tung, ⅛c. per lb. (79).
Shellac, superfine, 1c. per lb. (76).
TN, 1c. per lb.
Tin, straits, 1c. per lb. (36).

Prices Reduced

Caraway seed, Dutch, ½c. per lb. (59).
Cardamom seed, decorticated, 5c. per lb. (59).
Cassia, Saigon, all medium, 1c. per lb. (59).
Clove 1c. per lb. (59).
Cottonseed meal, $3.50 per ton (79).
Ginger, African, 1c. per lb. (59).
Nigerian splits, 2c. per lb.
Greases, ⅛c. per lb. (79).
Methyl acetone, syn., 9½c. per gal. (63).
Oil, angelica root, $4 per lb. (59).
Calamus, $4 per lb. (59).
Cananga, native, 65c. per lb. (59).
Clove, USP, 5c. per lb. (59).
Coriander, 70c. per lb. (59).
Croton, $1.80 per lb. (59).
Cumin, $1.60 per lb. (59).
Fir, Canadian, 30c. per lb. (59).
Lemon, USP, Calif., 75c. per lb (59).
Palm kernel, ½c. per lb. (79).
Peanut, crude, ⅛c. per lb. (79).
Rue, 60c. per lb. (59).
Messina, 95c. per lb.
Peanut meal, $2 per ton (79).
Pimento, Jamaican, 1c. per lb. (59).
Poppy seed, ¼c. per lb. (59).
Soybean meal, $2 per ton (79).
Tallow, ⅛c. per lb. (79).
Wax, yellow 1c. per lb. (79).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

May 14, 1954	May 7, 1954	May 15, 1953
108.34	109.37	106.51

Cottonseed Loan Requisites Are Outlined in CCC Bulletin

Bulletin No. 1 stating the requirements with respect to loans under the 1954 cottonseed price support program of the Commodity Credit Corporation was issued last week by the Department of Agriculture. Bulletin No 2 containing the requirements with respect to purchase of cottonseed of the 1954 crop will be issued later.

Loans will be made on farm-storage cottonseed through January 31, 1955. The cottonseed tendered for a loan must be sound and clean and must not contain more than 11 percent moisture. "Off quality" or "below grade" cottonseed will not be eligible for loans. Loans will be made at the rate of $54 per ton.

Roure-Dupont Elects V.-P.

Louis Amic, president of Roure-Dupont, Inc., New York, has announced the election of Jacques D'Aigremont as executive vice-president of the company. He also revealed the resignation of Pierre J. Coutin as vice-president in charge of sales (see story on page 5). Roure-Dupont is the sole agent in the United States and Canada for Roure Bertrand Fils and Justin Dupont, Grasse, France, and specializes in essential oils and aromatic products.

SOCMA Told of Roads To Economic Recovery

The current slump in business "has been the smallest of our three recent recessions," amounting to a decline of about 3⅓ percent of the national output, Arthur R. Upgren, dean of the Amos Tuck School of Business Administration at Dartmouth College, told the Synthetic Organic Chemical Manufacturers Association meeting in New York last week as he outlined three methods by which, he said, recovery could be assured.

"The current recession is a very definitely measurable affair. It is so far a 3.34 percent affair. A year ago this quarter, we reached our peak rate of production of all goods and services. It was $371,400,000,000 per year. In the first quarter of the present year, the latest available, the rate of output was about $359,000,000,000. It is this decline, then, of $12,400,000,000, amounting to about 3⅓ percent, which measures the current recession," Mr. Upgren said.

"How can recovery be secured? Three principal answers can be given," the speaker said.

"First we need an intelligent and an expanding financing of consumption of goods upon the basis of which credit may be appropriately given. If we are able to produce in a larger amount than we are producing, then a financing of consumption to get an enlarged production is equally as important as the financing of production which has been so generally the creed of the past period.

"A second step to recovery is a continued expansion of all the facilities needed by our society, many of which are provided by government. Our highway structure needs probably as much as $40,000,000,000 of expenditure according to a recent careful compilation of the Brookings Institution of Washington. Our population will grow, and has grown in the last ten years, by about 24,000,000 persons compared to a growth in the 1930's of only 8,000,000 persons. So we need a very great expansion to meet these needs.

"The final way in which we can promote recovery is to adopt that intelligent kind of a tax system which will, by lightening the burden here, produce a compensatory upward thrust in total production. We are seeing some of that in the present year and we could promote a very considerable part of the wanted expansion of the national production to the $400,000,000,000 level by wise tax policies. They deserve careful study on the part of all," Mr. Upgren said.

Sun Picks Sales Director

M. J. Hoover has been appointed sales director of Sun Chemical Corporation, Long Island City, N. Y., and a member of the corporation's management committee, it was announced last week by Ralph C. Persons, president. Since joining Sun Chemical in 1936, Mr. Hoover has been general manager of one of Sun's sales divisions. In his new position as sales director, Mr. Hoover will be responsible for the coordination of the activties of all Sun Chemical's sales divisions.

Valspar Sales Vice-Pres.

Paul MacDonald has been named vice-president in charge of sales and elected a director of Valspar Corporation, New York. Mr. MacDonald had been connected with Sears Roebuck & Co.'s Chicago office for twenty years. His last position with that concern was as a buyer of building materials.

Grace, Davison Consolidation Is Approved by Stockholders

Stockholders of Davison Chemical Corporation, Baltimore, Md., and of W. R. Grace & Co., New York, at separate meetings last week approved a merger of the two companies. The merger organization will be known as W. R. Grace & Co., with Davison operating as Davison Chemical Company Division of W. R. Grace & Co.

The present board of directors of Davison will continue as members of an advisory board of the Davison division, and present officers of the company will continue in corresponding posts of the new division of Grace. At the Grace meeting, the stockholders authorized the issuance of up to 635,499 additional shares of Grace common stock to be used to carry out the merger.

Gen'l Dyestuff, Gen'l Aniline Controller's Post to Esposito

Frank L. Esposito has been named controller of General Dyestuff Corporation and the dyestuff and chemical division of General Aniline & Film Corporation, New York. Mr. Esposito, who had been controller at the company's Linden, N. J., plant since 1950, succeeds Arthur J. Young who was recently elected controller of General Aniline.

Mr. Esposito held the position of controller with Cramp Shipbuilding Company, Philadelphia, prior to joining General Aniline. Previously, he was controller for the New York World's Fair Corporation. He was a supervisor of fiduciary accounting with New York Trust Company before joining the World's Fair Corporation.

Mathieson, Olin Plan Merger Into Half-Billion-Dollar Firm

The boards of directors of Mathieson Chemical Corporation, Baltimore, Md., and Olin Industries, Inc., East Alton, Ill., last week voted unanimously to submit to their stockholders at special meetings on June 29 a proposal to merge the two companies.

The announcement was made jointly by John M. Olin, president of Olin Industries, and Thomas S. Nichols, president and chairman of Mathieson. The name of the new company will be Olin Mathieson Chemical Corporation. Following the merger Mr. Olin will become chairman of the board of Olin Mathieson and Mr. Nichols will become president. Mr. John W. Hanes will become chairman of the finance committee.

Based on 1953 figures the combined corporation will have total assets of about $500,000,000 and sales of over $500,000,000, including sales of non-consolidated subsidiaries and licensees.

Stock Transaction Detailed

When the merger becomes effective, each outstanding share of Mathieson preferred stock and each outstanding share of Olin preferred stock will be one share of Olin Mathieson $4.25 convertible preferred stock, and each outstanding share of Mathieson common stock and each outstanding share of Olin common stock will be one share of Olin Mathieson common stock. When the merger is approved and carried out, a 5 percent stock dividend on the Mathieson common stock will be paid prior to the effective date.

The proposed combination will be a diversified processing and manufacturing enterprise. Both companies were founded in 1892, generally are of the same size, and each has approximately 18,000 employees.

Mathieson is producer of industrial and agricultural chemicals, petrochemicals, and through its E. R. Squibb & Sons Division, drugs and pharmaceuticals. Its

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Standard Oil Development's 'Hydrofining' Progress Told

Nineteen units of the recently perfected refining process known as hydrofining are to be built, and some have already been installed, in the United States, England, France, Germany and Canada, it has been announced by Standard Oil Development Company. A wide variety of products, from gasolines to waxes, will be upgraded in these units. All of the installations are for affiliates of Standard Oil Company (New Jersey), for which Standard Oil Development does research and engineering. The company meanwhile announced it would also make the process available to other companies in the industry under license.

Combined capacity of the nineteen units will be 155,000 barrels daily. Three units in this country and two in England are already in operation, with a total capacity of 28,000 barrels per day. The process uses hydrogen to improve the quality and purity of gasoline, home heating oil and other petroleum products.

Attapulgus, Edgar Union Hinges on Tax Law Action

Attapulgus Minerals & Chemicals Corporation, Philadelphia, and Edgar Brothers Company, Metuchen, N. J., have announced that proxies in favor of the merger of the companies have been received by each company in amounts substantially in excess of these necessary to approve the merger.

The merger is presumed to be tax-free under existing law and under the tax bill recently passed by the house, the companies stated. While no amendments to this bill are expected, it has been decided to delay completing final details of the merger until further information is available as to the senate finance committee's proposed amendments to the house version of the 1954 tax bill. Accordingly, meetings of the stocksholders of each company called to act on the merger have been adjourned to June 2.

Coutin Joins Chaleyer & Co.

Pierre Coutin, formerly vice-president of Roure-Dupont, Inc., New York, has joined the essential oils firm of Ph. Chaleyer & Co., New York, as executive vice-president and a director. He will assume his new duties on June 1, according to Philip Chaleyer, president of the concern. Mr. Coutin has been associated with the essential oils industry for over twenty-seven years.

AIC Seats Dr. Keyes; Dinsmore Pres.-Elect

The American Institute of Chemists at its annual meeting in Asbury Park, N. J., last week installed Dr. Donald B. Keyes as president for a two-year term. Dr. Keyes, who is New York representative for Arthur D. Little, Inc., Cambridge, Mass., succeeds Dr. Lincoln T. Work, New York consulting chemical engineer, as institute head.

Elevation of Dr. Keyes to the AIC presidency was an automatic procedure, since he served as president-elect for the 1952-54 term. Named president-elect for the 1954-56 term was Dr. Ray P. Dinsmore, vice-president of research and development of the Goodyear Tire & Rubber Company, Akron, Ohio. Dr. Dinsmore will automatically succeed to the presidency in May, 1956.

Dr. Donald B. Keyes

Re-elected to a two-year term as secretary of the institute was Dr. Lloyd Van Doren, New York patent consultant. Dr. Frederick A. Hessel, commercial manager, commercial development department, General Aniline & Film Corporation, New York, was re-elected for another two years as treasurer.

Elected to three-year terms as AIC councillors were the following:—Dr. Emil Ott, director of research, Hercules Powder Company, Wilmington, Del.; Dr. William J. Sparks, 1954 AIC Gold medalist and director, Standard Oil Development Company, Linden, N. J., and Dr. John R. Bowman, director of research, department of

—*Continued on page 38*

Alcohol Superiority Claimed By Stepan for 2 New Items

Stepan Chemical Company, Chicago, believes its two new fatty alcohols, "Manakol 8" and "Manakol 9" have considerably greater percentages of unsaturated alcohols than any other commercially available long-chain alcohols developed up to this time, the company has announced. "Manakol 8" has a total unsaturated alcohol content of 88 percent and "Manakol 9" has a total unsaturated alcohol content of 91 percent.

"Makanol 8" is a blend of higher carbon fatty alcohols derived through the sodium reduction of soybean oil, and "Makanol 9" is from linseed oil. The manufacturer also states that preliminary research indicates the products have particular potentials for use as esters to contribute to the drying properties of protective coatings and as modifiers in alkyd resins and polyesters. Other possibilities are for use in the manufacture of quarternary ammonium types of germicides. The "Makanols" react with maleic anhydride to form resinous materials, and their derivatives show promise as lube oil additives, Stepan reported.

Allied Doubling Refrigerants Output at Baton Rouge Plant

New construction that will double the output of "Genetron" refrigerants and propellents is under way at its Baton Rouge, La., plant, General Chemical Division, Allied Chemical & Dye Corporation, announced last week.

The latest project is the second major expansion in "Genetron" production recently undertaken at the Baton Rouge works. The plant's previous capacity had already been tripled by an earlier program of expansion.

The new addition is scheduled for completion early this summer. General Chemical's line of organic fluorine compounds include "Genetron" 12 dichlorodifluoromethane and "Genetron 11" trichloromonofluoromethane.

Washington Talks It Over

By Ralph L. Cherry

Steps have just been taken by the Army Quartermaster Corps in the field of food preservation which—if proven successful and there is reason to expect that they might—may have lasting repercussions upon the chemical industry. A number of contracts have been let by the army calling for studies of all aspects of the radiation sterilization of foods, and to determine the most effective methods of preserving specific foods by irradiation.

The program covers a five-year period and will have the active participation of the Atomic Energy Commission, elements of the armed forces, and other governmental agencies as well as educational and industrial institutions of the country. The project is an example of the possibilities suggested by President Eisenhower for applying atomic energy to the peaceful pursuits of mankind.

The long-range objective is to learn whether foods may be preserved by irradiation as a substitute for present treatments by heat, chemicals, and other processing without detracting from the natural odor, color, flavor, and texture of foods. Should the research program prove successful, predictions of radical changes are being made in the packaging and processing of many foods, both for the military and civilians.

Much basic research in the preservation of foods by irradiation already has been done and it is because of the indications shown in these studies that it was decided to go into the subject further. An ad hoc subcommittee of the National Research Council has endorsed the project in glowing terms. It said that "no other method of preservation of foods is so far advanced, appears to offer greater possibilities, or is as economically feasible as is the radiological sterilization method in its present stage of development."

Successful sterilization of foods by gamma ray bombardment could, over the years, remove the food processing industry as a major customer of the chemical industries for its mold retardants and antioxidants, and possibly its flavor accentuators, such as mono-sodium glutamate. Tests have demonstrated that gamma radiation has the effect of destroying the ability of microorganisms to reproduce and thus partially or completely eliminate the most important factor involved in the spoilage of foods. Experiments also have shown that radiation is capable of destroying food-infesting insects and trichina worms.

Where You Can Sell

The Small Business Administration has just put out a "Government Purchasing Directory" representing the first complete guide to military and civilian purchasing activities of the federal government to be

—*Continued on page 78*

Reilly

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Available from Reilly's newly expanded manufacturing facilities are many Pyridine derivatives, natural and synthetic.

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Association Meetings

This Week

American Coke and Coal Chemicals Institute, regional meeting, Westchester Country Club, Rye, N. Y., May 17.
Basic Materials Exposition, International Amphitheatre, Chicago, May 17-20.
Chemical Market Research Association, annual meeting, Statler hotel, New York, May 20.
Flavoring Extract Manufacturers' Association, annual convention, Biltmore hotel, New York, May 16-19.
Salesmen's Association of the American Chemical Industry, dinner meeting Toots Shor restaurant, New York, May 19.

American Oil Chemists' Society, fall meeting, Radisson hotel, Minneapolis, Minn., October 11-13.
American Chemical Society, Chicago section, national chemical exposition, Chicago Coliseum, October 12-15.
American Drug Manufacturers Association, annual meeting, Lake Placid Club, Lake Placid, N. Y., June 28-30.
American Institute of Chemical Engineers, annual meeting, Statler hotel, New York, December 12-15.
American Petroleum Institute, Conrad Hilton hotel and Palmer House, Chicago, November 8-11.
American Pharmaceutical Association, Statler hotel, Boston, August 22-27.
American Plant Food Council, annual meeting, Homestead, Hot Springs, Va., June 10-13
American Society for Testing Materials, annual meeting, Sherman and Morrison hotels, Chicago, June 13-18.
American Soybean Association, annual convention, Memphis, Tenn., August 30-September 1.
American Water Works Association, annual conference Seattle, Wash., May 23-28.
Animal Health Institute, annual meeting, Edgewater Beach hotel, Chicago, June 14-16.
Association of Consulting Chemists and Chemical Engineers, annual meeting, symposium, Belmont Plaza hotel, New York, October 26.
Chemical Institute of Canada, annual conference and exhibition, Royal York hotel, Toronto, June 21-23.
Chemical Specialties Manufacturers Association, midyear meeting, Netherlands Plaza hotel, Cincinnati, Ohio, May 23-25; annual meeting, New Yorker hotel, New York, December 5-7.
Drug, Chemical and Allied Trades section, New York Board of Trade, annual meeting, Pocono Manor Inn, Pocono Manor, Pa., September 22-25.
Federal Wholesale Druggists' Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., September 19-22.
Federation of Paint and Varnish Production Clubs, annual meeting, Palmer House, Chicago, November 18-20.
Magnesium Association, annual meeting, Chase hotel, St. Louis, Mo., November 15-17.
Manufacturing Chemists Association, annual meeting and joint outing with SOCMA, Greenbrier hotel, White Sulphur Springs, W Va., June 3-5.
National Chemical Exposition, Chicago Coliseum, Chicago, October 12-15.
National Fertilizer Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 14-16.
National Foreign Trade Council, annual convention, Waldorf-Astoria hotel, New York, November 15-17.
National Paint, Varnish and Lacquer Association, annual meeting, Palmer House, Chicago, November 15-17
Packaging Machinery Manufacturers' Institute, Grove Park Inn, Asheville, N. C., September 23-26.
Parenteral Drug Association, annual meeting, Barbizon-Plaza hotel, New York, October 27-29.
Plant Maintenance Show, Pan Pacific Auditorium, Los Angeles, July 13-15.
Proprietary Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 24-26.
Proprietary Association of Canada, annual meeting, Thousand Island Club, Alexander Bay, N. Y., June 14-16.
Society of the Plastics Industry, exposition, technical conference, Public Auditorium, Cleveland and Statler hotels, Cleveland, Ohio, June 7-10.
Synthetic Organic Chemical Manufacturers Association, joint outing with MCA, Greenbrier hotel, White Sulphur Springs, W. Va., June 3-5.
Toilet Goods Manufacturers Association of Canada, annual meeting, Whiteface Inn, Lake Placid, N. Y., June 14-16.
World Congress on Surface Active Agents, Sorbonne, Paris, France, August 30-September 3.

American Oil Chemists Set Fall Meeting October 11-13

The American Oil Chemists' Society has announced details for its 28th fall meeting to be held October 11 through 13 at the Radisson hotel, Minneapolis, Minn. J. C. Konen, of Archer-Daniels-Midland Company will be general chairman of the meeting, and Harold Wittcoff, of General Mills, Inc., will be program chairman. Exhibits chairman will be George N. Walker, of Minnesota Linseed Oil Company. General subjects of the meeting will be analytical technics, drying oils, waste disposal and synthetic detergents.

Parenteral Drug Parley Slated

The Parenteral Drug Association will hold its annual meeting October 27 to 29 at the Barbizon-Plaza hotel, New York.

Chemical Progress Report: 1904

In celebration of Chemical Progress Week, which gets under way today, OIL, PAINT AND DRUG REPORTER *reprints an article from its pages of fifty years ago—to be exact, its issue of May 16, 1904. The article, entitled "Early Chemical Manufactures" and originally written for the* Journal of Franklin Institute *by M. I. Wilbert, recounts the early history of the chemical industry of this country. This turn-of-the-century appraisal of chemical progress will, we think, help put into proper perspective the tremendous achievements made since that time.—The Editors.*

Chemical industries play such an important part in supplying the needs and wants of our every-day life that we, at times, can hardly realize that the time was, and not so long ago, when in the whole length and breadth of this great land there were practically no manufactures of this kind. It is now not much more than a century ago since the manufacture of chemicals, as such, was commenced in this city, and this, so far as known, was the first in the country. In a short sketch of this kind it would, of course, be practically impossible to describe, or even enumerate, all of the concerns that have been interested in the manufacture of chemicals since the first introduction of the industry in America. We will content ourselves, therefore, by attempting to call your attention to some of the varied and interesting materials that are available for an extended sketch, or a history of this subject.

Chemical processes enter so largely into manufactures of all kinds that it is at times difficult indeed to draw a distinctive line between what may or may not properly be classed as chemical products. For this reason we will confine ourselves, as much as possible, to the enumeration of substances of a distinctly chemical nature that are or may be used in other arts and manufactures or in the practice of medicine.

Aborigines Made No Chemicals

There is no distinct evidence that the aboriginal inhabitants of any portion of North America produced or used chemical substances as such. A number of these inhabitants did make use of chemical processes in the making or manufacture of pottery, paper, paint pigments and fermented drinks; but even these were produced in limited quantities, and there was nothing like a general or widespread industry.

Chronologically, then, the earlier efforts at the manufacture of chemical substances may readily be divided into three distinct periods.

(1) The colonial period, from the first settlement of the country, to the time of the Revolutionary War.

(2) The period from the Revolutionary War to the War of 1812.

(3) The period from the War of 1812 to the rejuvenation of interest in scientific pursuits, about the middle of the nineteenth century.

The chemical manufactures of these several periods were quite distinctive. In the first period, the manufacturers in the chemical line were confined to the production of potashes and lime, with stray experiments and trials in the manufacture of saltpeter and gunpowder.

Salt and Gunpowder Operations

In the second period, largely, if not entirely, brought about the exigencies of war, manufactures of salt and gunpowder were established as permanent industries, while the manufacture of paint pigments and a number of chemical substances was tentatively established in Philadelphia.

In the third period, due directly to the War of 1812 and the commercial restrictions which preceded it, we have the introduction of the manufacture of sundry chemicals for technical and medicinal purposes.

So far as is known, the first chemical substances made in America were produced in the Jamestown Colony, where as early as 1608 the manufacture of pot- or soapashes was tried, and the resulting product, with samples of pitch, glass and clapboard, was sent to England by these first colonists.

It would appear, therefore, that chemical substances were among the first exports of manufactured articles from what is now the United States.

While there is little or no evidence that the manufacture of potashes was entered into extensively for the next two or three decades, pot- and pearlashes did, in later periods, constitute a very important article in the exports of nearly all of the English colonies in North America.

In this connection it might be of interest to mention that there are a number of records of premiums having been offered and awarded, by both home and colonial societies, for the encouragement of the industrial arts, for the largest and best production of pot- or pearlashes.

Potash Exported in Seventeenth Century

Gabriel Thomas, in his account of Philadelphia and the province to the year 1696, mentions potashes among the list of exports, and in later years, even down to the opening decades of the nineteenth century, the making of potashes constituted one of the more important industries of Philadelphia, a number of manufacturers of this product being located along the Delaware front.

During the colonial period potash works were numerous throughout the American colonies. In Massachusetts alone, toward the end of the eighteenth century, it was estimated that they numbered fully 250. Many of these establishments were being conducted on a large scale and were quite successful. The average exports of pot- and pearlashes from the United States at the beginning of the nineteenth century, according to the "Statistical Annals of the United States from 1789 to 1818," by Adam Seybert, was about 6,000 tons annually.

The manufacture of soap was probably one of the first uses for which the alkali was employed in the colonies. Soap boiling as a commercial venture was introduced at quite an early date. The father of Benjamin Franklin, Josiah Franklin, was probably one of the first to engage in it as a business. Josiah Franklin, a dyer by trade, came to Massachusetts about 1682, and engaged in business as a tallow-chandler and soapboiler.

Earliest Mention of Lime Manufacture

The earliest mention of the manufacture of lime is probably that in the records of Providence, Rhode Island, where, in 1662, a Mr. Hatchet applied for liberty to burn lime and to take stone and wood from the public commons for the purpose.

It is quite probable, however, that lime had been burned, even before this date, from shells that were found in great profusion along the coast. This shell lime was the principal dependence in several of the colonies until after the beginning of the eighteenth century.

In or near Philadelphia, lime is said to have been made from limestone, about 1681, at Mountjoy, a manor that belonged to Letitia, the daughter of William Penn.

Common salt, one of the prime necessities of the European, was first made in the Virginia Colony some time previous to 1620. These earlier works were allowed to fall into decay, but were rebuilt, and in 1633 there is a record of salt having been made in appreciable quantity. In that year a considerable amount of salt was exported to Massachusetts for use in the fisheries.

New Hampshire Salt Works

About 1623 salt works were erected by a company on a site in or near the present city of Portsmouth, N. H. Several other attempts at the manufacture of salt from sea water are recorded, but as none of these proved successful or were continued

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Mallinckrodt Sales Appointee

E. Richard Kuehne has been appointed Chicago district sales manager for Mallinckrodt Chemical Works, St. Louis, Mo. Mr. Kuehne will be in charge of sales activities in Chicago and surrounding communities, Milwaukee and Madison, Wis., and the state of Iowa. This is part of the territory formerly supervised by regional sales manager Walter R. Nay, who died April 6.

CSMA Shapes Agenda For Midyear Conclave

The final plans for its fortieth midyear meeting have been announced by the Chemical Specialities Manufacturers Association. The meeting, which will be held May 23 through 25 at the Netherlands Plaza hotel, Cincinnati, Ohio, on the first day will be devoted to registration, a reception and cocktail party given by the president, and meetings of the board of governors and the committees.

The aerosol division will hear talks in the morning on May 24 including one on "Ethyl Cellulose in Aerosol—Applied Hair Lacquers and Artificial Snow" by Herman G. Philips, jr., of Hercules Powder Company, Wilmington, Del. The division will also hear E. P. Hay, of General Aniline & Film Corporation, New York, speak on "Formulating Aerosol Cosmetics." Floyd T. Smith, of the Department of Agriculture's agricultural research center at Beltsville, Md., will give a talk on "Pressurized Garden Aerosols from the Researcher's Viewpoint." "Aerosol Survey of 1953" will be presented by Frederick G. Lodes, of Precision Valve Corporation, Yonkers, N. Y.

Disinfectant, Sanitizers Session

The disinfectant and sanitizers division will hold a concurrent session, at which Milton J. Foter, of the public health service of the Robert A. Taft Engineering Center, Cincinnati, will speak on "Investigations Relative to Principles of Disinfection." "Clinical Evaluation of Germicidal Soaps" will be the subject of a paper by A. Haldane Gee and I. L. Seidenberg, of Foster D. Snell, Inc., New York. John W. Klimek and John H. Bailey, of Sterling-Winthrop Research Institute, Rensselaer, N. Y., are the authors of a paper entitled "Sanitizing Action of Roccal in Various Types of Water," which will be presented by Mr. Bailey. A report on "Bactericidal Activity of Fatty Acids and Related Compounds," by J. V. Karabinos and H. J. Ferlin, of Blockson Chemical Company, Joliet, Ill., will be delivered by Mr. Karabinos.

The concurrent meeting of the insecticide division will include a paper by Dr. R. E. Heal, of the National Pest Control

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Chemical Story to Be Told American Public This Week

Beginning today and continuing through this week, men and women of the chemical industry will be telling their neighbors in communities throughout the United States how chemistry is contributing to a healthier, happier and more prosperous life.

During the first annual Chemical Progress Week (May 17-22) sponsored by the Manufacturing Chemists' Association, the industry will explain how its products and research are serving the American people in almost every activity of their daily lives.

This educational program will be carried out almost entirely at the community level, by people of the industry in plants, laboratories and sales offices within those communities. In aggregate, it will represent the largest single educational program ever attempted by the industry.

According to national Chemical Progress Week headquarters in Washington, observances will be held in virtually every city and town in the United States in which chemical production, sales or research activities are conducted. There are more than 15,000 such establishments in the country, located in every state,

—Continued on page 71

Butter Support Program Is Attacked for Inequities

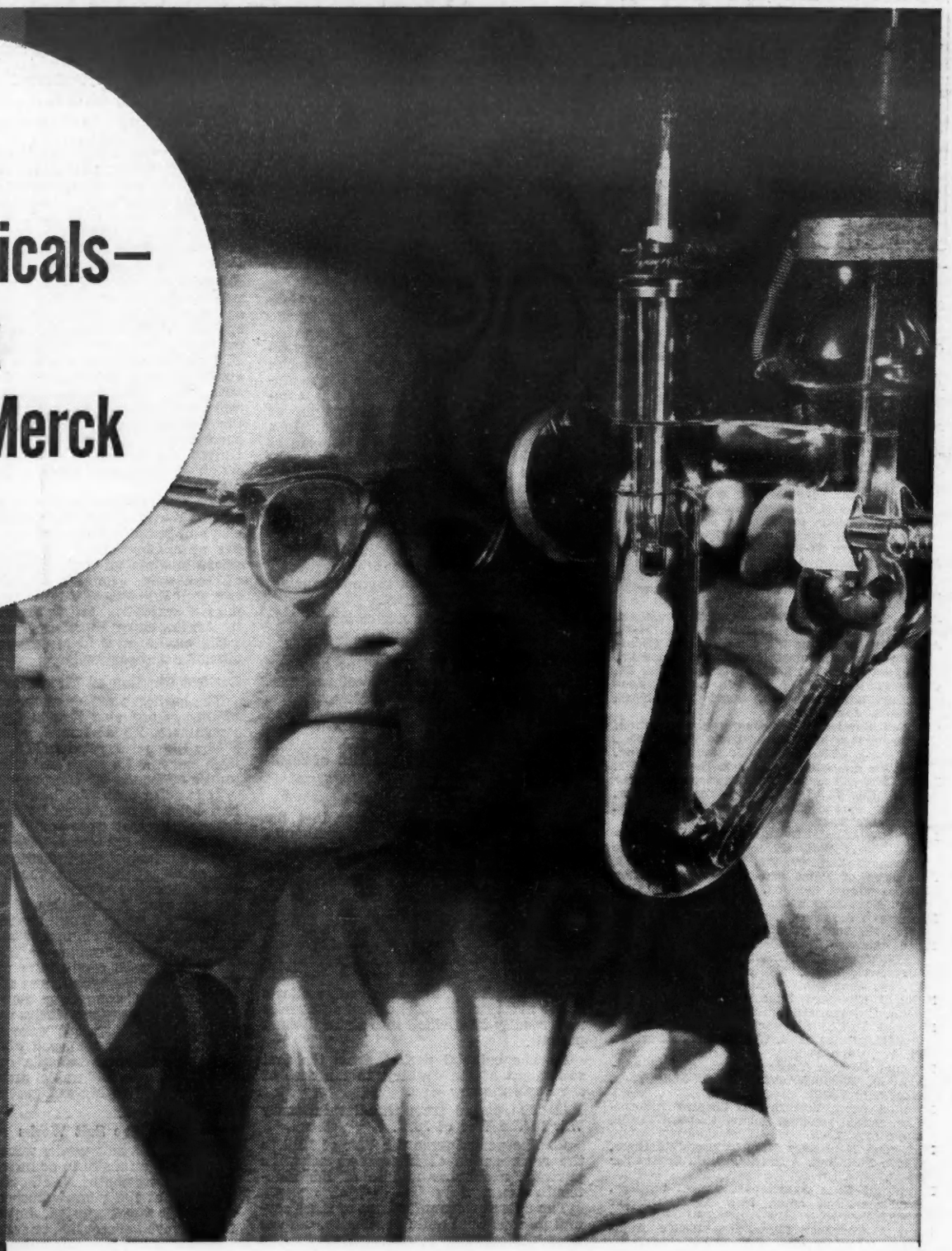
"The good objective of getting the butter out of surplus must not be permitted to create a new government discrimination against vegetable oils without any guarantee that the maladjustments responsible for the surplus will not be vigorously attacked," S. F. Riepma, president of the National Association of Margarine Manufacturers, told the National Cottonseed Products Association at the latter's annual meeting in Houston, Tex., last week.

Mr. Riepma pointed out that "it is seriously proposed to dump one surplus product, milk fat in the form of butter, on our home market at prices at which it is hoped the surplus butter will sell, with the loss such a sale must entail to be charged to the taxpayer and with no regard to the effect on competitor products or on the oils market itself."

"Apart from the unfairness implicit in the butter subsidized-sale program," Mr.

—Continued on page 71

For Fine Chemicals— Look First to Merck



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ANTIBIOTICS
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BROMIDES
CAFFEINE
CITRATES
EPHEDRINES
IODIDES
MAGNESIUM SALTS
QUININES
SALICYLATES
SULFONAMIDES
THEOPHYLLINES
THEOBROMINES
VITAMINS
ZINC SALTS

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RAHWAY, NEW JERSEY

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Current Market Quotations

Chemicals and Related Materials

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Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, May 14 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views.

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A

Acacia (see Gum arabic)
Acenaphthene below 92.5 C., m.p., dms works lb 40 —
above 92.5 C., m.p., bbls., dms., works lb. 41 .50
Acetaldehyde 99% dms c.l. frt. equald lb 1250 1435
l.c.l. frt equald lb 1350 1535
tanks, frt equald lb 1050 1300
Acetaldol (see Aldol).
Acetanilide tech., bbls., c.l., dlvd lb .29 —
ton lots lb. .30 —
smaller lots lb. .30½ —
USP, bbls., 2,000-lb lots lb. .80 —
smaller lots lb. .81 .86
Acetic anhydride dms. c.l., dlvd E. lb. .15½ —
l.c.l. dlvd E lb. .17 —
tanks, dlvd E lb. .14 —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .75 - —
l.c.l., dlvd. lb. .76 - —
Acetoacet-o-chloroanilide, fib., dms., c.l. dlvd lb 1.27 - —
l.c.l., dlvd. lb. 1.28 - —
Acetoacet-o-toluidide, fib., dms., c.l. dlvd lb 78 - —
l.c.l. dlvd lb 79 - —
Acetone, CP, dms., c.l., dlvd... lb. .10 - —
l.c.l., dlvd. lb. .11 - —
tanks, dlvd. lb. .08 - —
Methyl (see M)
Acetonitrile dms c.l works lb 45 —
l.c.l works lb 47 —
Acetophenetidine, USP, bbls., works, frt equald lb 1.15 1.17
Acetophenone cns. dms lb. 1.21 1.85
tech., dms., l.c.l., works lb. .75 - —
p-Acetylaminobenzaldehyde thiosemicarbazone, dms, frt, adjusted. lb. 17.50 -21.00
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 1.85
Acetyltributyl citrate tech dms., c.l lb. .33½ —
l.c.l lb. .38½ —
tanks lb. .32 —
Acetyltriethyl citrate tech., dms., c.l lb .37½ —
l.c.l lb. .38½ —
tanks lb. .36 —
Acid, abietic, com'l., dms., c.l., works lb. .12 —
l.c.l., ex whse lb. .1490- —
cryst., dms. c.l. works lb. .06½ —
l.c.l. works lb .07 .07½
Acetic, com'l or redist., 28% bbls. 100 lbs. 4.80 - —
56%, bbls 100 lbs 8.25 - —
70%, bbls 100 lbs. 9.95 - —
80%, bbls 100 lbs. 10.45 - —
glacial synthetic CP dms dlvd 100 lbs. 15.00 -16.00
tech., dms., c.l., dlvd 100 lbs. 10.50 -12.00
l.c.l. same basis 100 lbs. 11.00 -13.00
tanks, dlvd 100 lbs. 10.00 - —
USP cbys., inclusive, dlvd., 100 lbs. 24.00 -25.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP special, bbls., makers, primary distrib., point of ship't, 1,000-lb. lots lb. .60 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (80 mesh), bbls., same basis. lb. .55 - —

Freight equald, ship't identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.

Adipic, fib. dms., works lb. .37 .37½
Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.75
p-Aminobenzoic, tech., dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.50 - —
smaller lots, works, same basis lb. 2.55 - 2.60
p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb. 4.00 - —
smaller lots, same basis lb. 4.05 4.50
Anthranilic, bbls., frt equald lb. 1.21 - —
Arsenous, tech., (see Arsenic, white).
USP (see Arsenic trioxide.
Ascorbic USP dms. 25-50 kilo lots. kilo 21.00 - —
10-kilo lots kilo 21.35 - —
5-kilo lots kilo 21.75 - —
bots., 1-kilo lots kilo 22.00 - —
500-gram lots kilo 22.50 - —
Battery chys. c.l., works, E 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 3.45
Benzoic, tech. bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls. dms. 100-lb lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid, b-Oxynaphthoic).
Boric, tech 99½%, cryst., bgs., c.l., works ton. 124.25 - —
ton lots, ex whse., N. Y. or Chi ton. 172.00 - —
smaller lots, same basis, ton. 177.00 - —
bbls., c.l., works ton. 148.75 - —
ton lots, ex whse., N. Y. or Chi ton. 196.50 - —
smaller lots same basis, ton. 201.50 - —
gran., bgs., c.l., works ton. 99.25 - —
ton lots, ex whse., N. Y. or Chi ton. 147.00 - —
smaller lots, same basis, ton. 152.00 - —
bbls., c.l., works ton. 123.75 - —
ton lots, ex whse., N. Y. or Chi ton. 171.50 - —
smaller lots, same basis. ton. 176.50 - —
bulk, c.l., works ton. 94.25 - —
Acid, boric, tech., powd., bgs., c.l., works ton. 104.25 - —
ton lots, ex whse., N. Y. or Chi ton 152.00 - —
smaller lots same basis. ton 157.00 - —
bbls., c.l., works ton. 128.75 - —
ton lots, ex whse., N. Y. or Chi ton. 176.50 - —
smaller lots same basis. ton. 181.50 - —

Boric acid in kegs $45.50 per ton higher than in paper bgs USP boric acid $25 per ton higher.

Broenners bbls lb. 1.76 - —
Butyric, 99% dms. c.l., works, lb. .34 - —
l.c.l., works lb. .34½ - —
tankcars, works lb 32½ —
Cacodylic bots lb 10 50 13 00
Camphoric natural dms lb 4.00 4.75
synth dms lb 4 00 4 75
Capric, dms lb. .26¼ .28
Caprylic, dms lb. .29¾ - .31½
Cassella dms. frt alld lb 1.44 1 75
Castor oil, split, dms lb. .35½ .36
Chicago, bbls., frt alld lb. 3.21 - —
Chloroacetic, mono-, purified, flake, 99% dms lb. .23½ - .25¼
tech., flake, 96-97%, frt. equald, dms lb. .20 - .21
o-Chlorobenzoic, fib. dms., works lb. 1.13 - —
p-Chlorobenzoic, fib. dms., works lb. 1.59 - 1.62
Chlorosulfonic dms., c.l., frt. equald lb .046⅝ —
l.c.l. frt. equald lb. .051⅝ —
tanks, frt equald lb. .041⅝ —
Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.
Cholic, 25-100 lb bots. fiber dms. lb. No prices.
Chromic 99¾%, dms. c.l., works lb. .27½ —
l.c.l., works lb. .28 - .29
NF (see Chromium trioxide)
Cinnamic, ref'd, bots lb. 2.50 - 3.50
Citric, USP, anhyd., gran., fine gran., dms., c.l. lb. .28¾ —
10,000-lb lots, 1 ship't. lb. .29¼ —
smaller lots lb. .29¾ - .31¼
hydrous gran., fine gran., dms., c.l lb. .27 —
10,000-lb lots 1 ship't. lb. .27½ —
smaller lots lb. .28 - .29½
Powdered citric acid ½c. higher.
Acid, Cleve's, mixed, bbls lb. .79 - —
Coconut oil, dist., dms lb. .25¾ - .27½
tankcars lb. .24 - —
double dist., dms lb. .26¼ - .28
tankcars lb. .24½ - .24¾
Corn oil, dist., dms lb. .13¾ - .15
tanks lb. .12 - .13
Cottonseed oil, dist., dms lb. .11¼ - .13
tanks lb. .09½ - —
double dist., dms lb. .11¾ - .13½
tanks lb. .10 - .10¼
2,3-Cresotic, dms., ton lots, works, lb. .66 - —
smaller lots lb. 1.82 - 2.00
Cresylic, coaltar, dom., 50% 207° C or above, ret dms. c.l. frt. equald gal. .98 —
l.c.l., same basis gal. 1.03 - —
non-ret., dms. c.l., same basis gal 1.01 —
l.c.l. same basis gal. 1.04 - —
tanks, same basis gal. .90 - —
204° to 207° C., ret., dms., c.l., same basis gal. 1.03 - —
l.c.l., same basis gal. 1.08 - —
non-ret., dms. c.l. same basis gal. 1.06 —
l.c.l. same basis gal. 1.09 —
tanks, same basis gal. .95 - —
imp. 75% at 215° C. or over, dms. ex whse gal. .75 .90
petroleum, dom. 195° to 213° C, non ret dms., c.l. San Francisco and Los Angeles gal .71 —
l.c.l., same basis gal. .73 .75
tanks, same basis gal. .58 —
200° C. to 222° C., tanks, Wilmington, Cal gal. .58 .63
211° C to 236° C non-ret. dms c.l., San Francisco and Los Angeles gal. .63 —
l.c.l same basis gal .65 .67
tanks, same basis gal. .50 —
220° C. to 242° C., tanks, Wilmington Cal gal. .50 .53
245° C to 298° C., tanks, Wilmington Cal gal .45 —
Crotonic, fib. dms., c.l., 200 lbs. or more, works lb. .44 - —
Cyanoacetic, tech., bbls lb. .90 - 1.25
Dehydrocholic injection, fib dms., 10 to 100-lb. lots lb. No prices.
oral, fib., dms., 10 to 100-lb. lots lb. No prices.
Desoxycholic fib dms 10 to 100-lb lots lb. No prices.
Dichlorophenoxyacetic (see under 'D' 2,4-D)
Diethylbarbituric (see Barbital)
Diglycolic, bgs., works lb. .14 - —
Acid, 2-Ethyl hexoic, dms., c.l., works lb. .35 - —
l.c.l., works lb. .35½ - —
tanks, works lb. .33½ - —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots., fib. cns kilo-lots or more gram. 1.60 —
Formic, 85%, cbys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
l.c.l., works lb. .1675- .1775
Fumaric, tech., bgs., dms lb. .27 - .28
Gallic, NF VII, bbls., 1,000-lb. lots lb. 1.80 —
smaller lots lb. 1.82 - 2.00
technical, bbls., 1,000-lb. lots lb. 1.58 —
smaller lots lb. 1.69 1.78
Gamma dry, ground, bbls., frt. alld lb 1.50 —
paste, bbls., frt. alld lb. 1.45 —
Gentisic, 100-lb fib dms lb 6 50 —
Gluconic, tech., 50% bots lb. .25 - .35
cbys. lb. .19 —
dms. lb. .15½ —
l-Glutamic, 99½% fib. dms., 100 lb lots, works lb 2.45 2.53
25-lb. lots, works lb. 2.60 - 2.68
Glycerophosphoric, 35%, dms., works lb. 2.25 2.35
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., works, basis 100% lb. .82 —
paste, bbls., works, basis 100% lb. .80 —
Hydriodic, 1.50 s.g., cbys lb. 2.94 - —
1.70 s.g., cbys lb. 3.23 - —
Hydrobromic, medicinal, 48%, cbys., dlvd E lb. .37 .43
Hydrochloric, anhydrous (see Hydrogen chloride).
18° cbys., c.l., works 100 lbs. 2.50 —
l.c.l., dlvd Metropolitan area 100 lbs. 2.90 3.05
tanks, works, frt. equald ton. 28.00 - —
20° cbys., c.l., works 100 lbs. 2.60 - —
l.c.l., dlvd Metropolitan area 100 lbs. 3.00 4.00
tanks, works, frt. equald ton. 30.00 - —
22° cbys, c.l., works 100 lbs. 3.15 - —
l.c.l., dlvd Metropolitan area 100 lbs. 3.25 4.50
tanks, works, frt. equald ton. 35.00 - —
CP, USP, consumers, cbys., extra, c.l., works lb. .11¾ - —
l.c.l., same basis lb. .13¼ .13¾
5 pint bottles extra, cs., c.l., same basis lb. .16¾ - —
l.c.l., same basis lb. .19¼ - —
Acid, hydrochloric, CP, USP prices to dealers 1½c per lb less.
Hydrocyanic, cyls., frt. alld lb. .75 .93
dilute NF 2% 5-lb nets lb 40 —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
tanks, works lb. .21 - —
70%, steel dms., works lb. .18½ - .22½
Hydrofluosilicic, basis 30%, dms., works lb. .06 - —
Hydroxyacetic, tech. 70% bbls., non-return., Phila., 100% basis lb. .136 - —
tanks, Belle, W. Va., 100% basis lb. .093 - —
Hypophosphorus, purif., 50%, cbys lb. 1.30 1.32
USP, cbys lb. 88 —
Isonicotinic, 100 lb fib dms, works lb. 5.00 - —
Hydrazide (see Isoniazid).
J, bbls, works, basis 100% lb. 2.50 2.85
Koch, bbls., frt. alld lb. .64 - .70
L, bbls., works lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .17 - .20
smaller lots lb. .1750- .2100
80%, bbls., 5 or more lb. .30 - .3640
smaller lots lb. .305 - .3699
NF, 85%, cbys lb. .65 - .68
plastic grade, 50%, bbls., 20 or more, works lb. .2175- —
1 to 19 lb. .2225- .2278
80%, bbls., 5 or more lb. .3818- —
tech., 22%, bbls., c.l., works, 100 lbs. 6.30 - —
l.c.l., works 100 lbs. 6.70 - —
cbys., l.c.l., works 100 lbs. 7.20 -12.20
44% bbls., c.l., works 100 lbs. 11.45 -11.98
l.c.l., works 100 lbs. 11.15 -12.50
Laurent's, bbls lb. .60 - —
Lauric, 90%, dms lb. .36½ .38
Linseed oil, dist., dms lb. .2005- —
water white, dms. lb. .2305- —
Maleic, cryst., powd., dms lb. .37 - .38
Malic, tech., dms lb. .50 - —
Mandelic, NF, dms., 1,000-lb. lots. lb. 2.35 - —
smaller lots lb. 2.40 - 2.50
Metanilic, dms., works lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .54½ - —
smaller lots, works lb. .55 - —
Molybdic, 85-92%, dms. works lb 1.27 —
Monochloroacetic, purif. (see Acid, Chloroacetic, mono-).
Muriatic (see Acid, hydrochloric)
Myristic, dms lb. .28 - .29½
Naphthenic, 220-230 acidity, dms., works lb. .14 —
tanks, works lb. .12 - —
Naphthol (1)-4-sulfonic (see Acid Nevile and Winthers)
Naphthol(1)-5-sulfonic (see Acid, L).
Naphthol(1)5-sulfonic,8-amino (see Acid, S).
Naphthol(1)-3,6-disulfonic,8-amino (see Acid H).
Naphthol(2)-6,8-disulfonic (see Acid, Gamma)
(5)-7-Sulfonic,2-amino (see Acid, J).
Naphtholsulfonic, mixed (see Acid, Cleve's, mixed).
Naphthylamine(1)-5-sulfonic (see Acid, Laurent's).
(2)-6-sulfonic (see Acid, Broenner's).
(2)-1-sulfonic (see Acid, Tobias).

Abbreviations

Used in OPD Market Quotations

ACS	American Chemical Society
alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
a.p.a.	available phosphoric acid
artif.	artificial
ASTM	American Society for Testing Materials
Be.	Baume
bbls.	barrels
bgs.	bags
bls	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystal
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist.	destructive-distilled
dl-	dextro-laevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
liq.	liquid
m-	meta
m.a.p.	mixed anilin point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S. E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, Nevile and Winther's — Alcohol, Ethyl

Acid, Nevile and Winther's, dms., frt. alld lb. 1.20 - —
Nicotinic, USP, dms., frt. adjusted kilo 9.00 9.30
Amide, USP, (see Nicotinamide).
Nitric 36° Be cbys., c.l., works, E. 100 lbs. 5.25 - —
l.c.l., works, E 100 lbs. 5.55 - 6.35
38° Be cbys., c.l., works, E. 100 lbs. 5.75 - —
l.c.l., works, E 100 lbs. 6.05 6.80
40° Be, cbys., c.l., works, E. 100 lbs. 6.25 - —
l.c.l., works, E 100 lbs. 6.55 - 7.35
42° Be cbys., c.l., works, E. 100 lbs. 6.75 - —
l.c.l., works, E 100 lbs. 7.05 - 7.85
56.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.40 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.40 - —
CP NF, consumers, cbys., extra c.l., works lb. .13½- —
l.c.l., same basis lb. .15 - .15½
5 pint bottles, extra, cs., c.l., same basis lb. .17½- —
l.c.l., same basis lb. .19 - .25
p-Nitrobenzoic, dms., c.l., works lb. .72 - —
l.c.l., works lb. .73 - —
Oleic, single distilled, dms lb. .16 - .17¾
tanks lb. .14¼- —
double dist. (white), dms lb. .18½- .20¼
tanks lb. .16¾- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic)
Orthocresotinic (see Acid, 2,3-Cresotic).
Oxalic, bbls., c.s., works lb. .16½- —
10,000-lb. lots, works lb. .16¾- —
smaller lots, works lb. .17¾- —
b-Oxynaphthoic, bbls., works lb. 1.14 - —
Palm oil, double dist., dms lb. .13¼- .15
Para-aminobenzoic (see Acid, p-Aminobenzoic)
Acid, para-aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid, p-Chlorobenzoic)
Paramethylphenylcinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid, p-Toluidine m-sulfonic)
Phenylacetic, pure, cryst., cns. lb .75 - 1.70
Phenylcinchoninic (see Cinchophen).
Phenylglycolic (see Acid, mandelic).
Phosphoric, food grade, 75%, cbys. c.l., works 100 lbs. 7.30 - —
l.c.l., works 100 lbs. 7.80 - 8.30
tanks, works 100 lbs. 5.10 - —
NF, 85%, cbys., c.l., works lb. .08½- —
l.c.l., works lb. .09 - .09½
Picric, NF, bbls lb. .55 - —
ums smalr lb. .81 - .87
tech., bbls lb. .32 - .33
Propionic, synth. pure, dms., c.l., works lb. .21 - —
l.c.l., works lb. .22 - —
tanks, works lb. .19 - —
Pyrogallic, NF, (see Pyrogallol)
tech bbls lb 2.76 - 2.99
Ricinoleic (see Acid, castor oil, split).
S bbls works lb 3.25 - —
Salicylic, crude, fib. dms lb. .37 - —
sublimed, tech., fib. dms., c.l. lb. .39 - —
l.c.l. lb. .46 - —
dyestuffs grade, fib. dms lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powder, fib. dms lb. .53 - —
Sebacic, purified, dms, c.l., works. lb. .64 - —
l.c.l., works lb. .66 - .70
Soybean oil, double dist., dms lb. .16¾- .18
tanks lb. .15 - —
single dist., dms lb. .16 - .17¾
tanks lb. .14¼- —
Acid, stearic, double pressed, bgs. lb. .14¼- .16¾
single pressed, bgs lb. .13¾- .16¼
triple-pressed, bgs lb. .16½- .19
Succinic, purified, cryst., bbls., works lb. .63 - .75
Sulfanilic, tech., dms., c.l., frt. alld lb. .19 - —
l.c.l., frt. alld lb. .21 - —
Sulfuric, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
l.c.l., works 100 lbs. 2.45 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton 22.35 - —
98%, tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 - —
CP, NF, consumers cbys. extra, c.l., works frt. equald lb. .09¾- —
l.c.l., same basis lb. .11¼- .11¾
5 pt. botts., extra, cs., c.l., works frt. equald lb. .13¼- —
l.c.l. same basis lb. .14¾- .20¼
oleum, 20%, tanks, works ton 25.00 - —
40% tanks, works ton 29.00 - —
65% tanks, works ton 39.50 - —
Tallow, dist., dms lb. .13¼- .15
hydrogenated, dms lb. .14¼- .16
Tannic, NF, fluffy, bbls., 1,000-lb lots lb 1.59 1.60
smaller lots lb 1.65 1.76
powder bbls, 1,000-lb lots lb 1.50 —
smaller lots lb. 1.51 - 1.69
tech dms lb .95 - —
Tartaric, USP, dom., 230 or 250-lb., dms., c.l lb. .37 - —
10,000-lb. lots, 1 ship't. lb. .37½- —
smaller lots lb. .38 - —
100-lb dms lb. .39 - —
small dms lb. .41 - .47
imported, bgs lb. .32 - —
Acid, thioglycolic, refined, cbys., 100% basis lb. 1.80 - 1.86
Tobias, bbls., frt. alld lb. .74 - —
p-Toluenesulfonic, dms., c.l., works. lb. .16 - —
l.c.l., works lb. .17½- —
p-Toluidine-m-sulfonic, bbls., works lb. .92 - 1.04
Trichloroacetic, bots lb. 2.00 2.50
Trichlorophenoxyacetic (see under "T" 2,4,5T)
Undecylenic dms lb 1.40 - —
Aconite root, bls lb. .50 - .55
Aconitine, cryst., potent, bots oz. 78.00 - 85.00
Acrolein, tech., dms., c.l., works lb. .47 - —
l.c.l., works lb. .47½- —
Acrylonitrile, dms., c.l., works lb. .33 - —
l.c.l., works lb. .34 - —
tanks, works lb. .31 - —
ACTH, bots gram 15.00 - —
Adeps lanae (see Lanolin).
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 4.00 - —
powdered, 30 mesh, fib., dms lb. 4.50 - —
dl-Alanine, dms., works lb. 8.50 - 11.00
Albumin, blood, dark (see Blood, dried, soluble).
tignt, dms., c.l lb. .65 - .90
Egg, edible, flake, bbls lb. 1.69 - 1.73
powder, bbls lb. 1.73 - 1.77
tech., cryst., bbls lb. .93 - .96
Alcohol, allyl, dms., c.l., dlvd lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, ref.)
fermentation, ref'd, 128-132°C., dms., l.c.l., dlvd lb. .34 - —
ACS grade, dms., c.l., dlvd lb. .36 - —
mixed, primary, dms., c.l., works lb. .19¼- —
l.c.l., works lb. .20¼- —
tanks, works lb. .17¼- —
1-pentanol (synthetic normal), dms., c.l., works lb. .42 - —
l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
n-synthetic, dms., c.l., frt. alld., works lb. .17 - —
l.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .15 - —
sec-synthetic, dms., c.l., frt. alld., works lb. .19 - —
l.c.l., works lb. .20 - —
tanks, works lb. .16 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
l.c.l., frt. alld. E lb. .18 - —
tanks, frt. alld. E lb. .15 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½- .49
n-Butyl fermentation, dms., c.l., frt. alld. lb. .15 - —
l.c.l., frt. alld lb. .16 - —
tanks, frt. alld lb. .13 - —
n-synthetic, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
sec-synthetic, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
tert-synthetic, dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld. lb. .15 - —
tanks, works lb. .12 - —
Capryl, 85%, dms., c.l., works lb. .18 - —
l.c.l. works lb. .18½- —
tanks, works lb. .16½- —
95%, dms., c.l., works lb. .19½- —
l.c.l., works lb. .20 - —
tanks, works lb. .18 - —
Cetyl, extra fin. cns., 500-lb lots or more lb. .73 - —
smaller lots lb. .80 - 1.15
NF, fib. cns., 140-lb lots or more lb. .58 - .82
smaller lots lb. .59 - .82
Cinnamic, bots lb. 2.15 - 2.75
Decyl, bots lb. 1.75 - 2.00
Industrial (see 1-Decanol).
Denatured, CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis. gal. .59½- .65½
tanks, dlvd., same basis gal. .41½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.
Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.
SD1, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis gal. .60½- .66½
tanks, same basis gal. .42½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis gal. .59 - .65
tanks, same basis gal. .41 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis gal. .60½- .66½
tanks, same basis gal. .42½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis gal. .59½- .65½
tanks, same basis gal. .41½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis gal. .59 - .65
tanks, same basis gal. .41 - —
Diacetone, acetone-free, dms., c.l., dlvd. lb. .14 - —
l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .12 - —
tech., dms., c.l., dlvd lb. .13¼- —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11½- —
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies. gal. 20.48 - —
l.c.l., same basis gal. 20.53 - 20.59
tanks, same basis gal. 20.35 - —
tax free, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
absolute, 200 pf., tax paid, dms., c.l., dlvd. E. of Rockies, gal. 21.56 - —
l.c.l., same basis gal. 21.63 - 21.69
tanks, same basis gal. 21.45 - —

For You Who Want
QUALITY in QUANTITY

It's a fairly simple matter to achieve quality and consistency at the pilot plant level. But here at Publicker we maintain those characteristics while producing millions of gallons annually. Customers who demand quality in quantity have been on our books for many, many years. May we add *your* name?

ACETALDEHYDE
ACETIC ACID, GLACIAL
ACETONE C.P.—AMYL ACETATE
BUTYL ACETATE, NORMAL
BUTYL ALCOHOL, NORMAL
ETHYL ACETATE—ETHYL ALCOHOL
FUSEL OIL, REFINED
ISOAMYL ALCOHOL
PACO SOLVENT, T.R. 590

PUBLICKER INDUSTRIES Inc.

1429 WALNUT STREET, PHILADELPHIA 2, PA.

PHILADELPHIA—LOCUST 4-1400 • PITTSBURGH—LOCUST 1-8527

New York & New England Distributor, Publicker Alcohol & Chemicals Sales Corporation

NEW YORK—MURRAY HILL 8-6379 • BOSTON—FAIRVIEW 4-1888

Alcohol, 2-ethylbutyl, dms., c.l., works lb. .29½ - —
l.c.l., works lb. .30 - —
tanks, works lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E lb. .23¾ - —
l.c.l., same basis lb. .24¾ - —
tanks, same basis lb. .21¾ - —
Furfuryl, tech., cns., works lb. .29 - —
dms., c.l., works lb. .21 - —
l.c.l., works lb. .22 - —
tanks, works lb. .184 - —
Isoamyl (see Alcohol, amyl, fermentation, refined).
Isobutyl, dms., c.l., dlvd lb. .13¾ - .14
l.c.l., dlvd lb. .14¼ - .15
tanks, dlvd lb. .12 - —
Iso-octyl, dms., c.l., dlvd lb. .23 - —
l.c.l., dlvd lb. .24 - —
tanks, dlvd. E lb. .21 - —
Isopropyl, refd., 91%, dms., c.l., dlvd gal. .48 - —
l.c.l., dlvd gal. .55 - —
tanks, dlvd gal. .35 - —
95% dms., c.l., dlvd gal. .50 - —
l.c.l., dlvd gal. .57 - —
tanks, dlvd gal. .37 - —
99% dms., c.l., dlvd gal. .52 - —
l.c.l., dlvd gal. .59 - —
tanks, dlvd gal. .39 - —
Lauryl, bots. lb. 2.00 - 2.50
Methyl (see Methanol).
Methylamyl (see Carbinol, methyl-isobutyl)
Octyl, perfumer's grade, bots lb. 1.75 - 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms lb. 1.57 - 2.15
standard dms. lb. 1.35 - —
n-Propyl, dms., c.l., dlvd lb. .12 - —
l.c.l., dlvd lb. .13 - —
tanks, dlvd lb. .10 - —
Tetrahydrofurfuryl, cns., Cedar Rapids, Iowa lb. .54 - —
dms., c.l., Niagara Falls, N. Y. lb. .44½ - —
l.c.l., Newark, N. J lb. .47 - —
tanks, Niagara Falls, N. Y lb. .43 - —
industrial grade, dms., c.l., Niagara Falls, N. Y lb. .305 - —
l.c.l., Newark, N. J lb. .33 - —
tanks, Niagara Falls, N. Y. lb. .29 - —
Wood (see Methanol).
Aldol, 95%, dms., works lb. .23 - —
denaturing grade dms gal. 2.15 - —
Aldrin, 60% soln., dms., c.l., works, frt. alld lb. .538 - —
l.c.l., works, frt. alld lb. 755 - —
Aletris root, bgs. lb. 1.75 - 1.85
Algin (see Sodium alginate).
Allethrin 100% dms. frt., alld lb 32.00 - —
90%, dms., frt. alld lb. 29.15 - —
solution 20% dms. 100-lb tots frt. alld lb. 6.80 - —
2½%, dms., frt. alld lb. .90 - 1.25
Allspice (see Pimento).
Allyl bromide, cnys., works lb 1.35 - 1.40
Chloride, dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd. lb. .18 - —
tanks, dlvd lb. .15 - —
Starch, solid dms., works lb. .52¾ - .54¾
solution, 40% toluol-butanol, dms., works lb. .25½ - .26¼
Aloe, Cape, cs. .36 - —
powdered, cs. lb. .50 - —
Curacao, kgs. lb. .50 - .55
Socotrine, kgs. lb. No prices
Aloin, USP, bbls., dms., kgs lb. 3.75 - 3.82
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs. 5.20 - —
USP, burnt, dms lb. .20 - .21
hydrous, dms. lb. .07¾ - .08
Potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt dms lb. .20 - .21
hydrous, dms lb. .07¾ - .08
Potash-chrome, dms. lb. .17 - —
Sodium, dms., c.l., works 100 lbs. 4.60 - —
l.c.l., works 100 lbs. 5.00 - —
Alumina, calcined, bgs., c.l., works. lb. .0385 - —
l.c.l., works lb. .0410 - .0510
Aluminum acetate, basic solut., 24%, bbls., l.c.l. works lb. .14 - —
Chloride, com'l, anhyd. dms., c.l., works, frt. equald lb. .15 - —
l.c.l., works, frt equald, lb. .1550 - —
cryst., dms., c.l., works lb. .1030 - —
l.c.l., works lb. .1070 - —
soln. 32° cbys., c.l., works lb. .0369 - —
l.c.l., works lb. .0435 - .0960
tanks, works 100 lbs. 2.80 - —
NF, gran., dms. works lb. .29 - .31
Fluoride, tech., anhyd., bgs., c.l., works lb. .1540 - —
l.c.l., works lb. .1640 - .1890
Aluminum fluoride, in fib. dms., 0.35c. per lb. higher.
Formate, basic solution, cbys. lb. .09½ - —
l.c.l., works lb. .10 - —
Hydrate, heavy, bgs., c.l., frt. equald ton.60.00 - —
l.c.l., works ton.65.00 - 85.00
light bgs. dlvd lb. .17 - —
Hydroxide, gel., pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
contract, works lb. .21 - —
9-9½% Al_2O_3, fib dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP, XIV, fib., dms., works lb. .82½ - —
contract, works lb 79½ - —
tech., powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .21½ - —
pigs, 10,000-lb. lots, frt. alld. lb. .20 - —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .63½ - —
standard, dms lb. .43 - —
Powder, lining, extra fine, dms lb. 1.02½ - —
standard, dms lb. .72 - —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c per lb for 100-lb. dms., 1½c. per lb for 50-lb dm. 3c. per lb. for 10-lb. can and 5c. to 12c per lb for smaller containers. Deduct 1c. per lb for single shipment of 400 to 1,499 lbs. 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs., and 4c. for 30,000 lbs. or more Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Resinate, precip., dms., frt. alld lb. .27½ - —
Stearate, dibasic, ctns., c.l. lb. .33 - —
l.c.l. lb. .34 - .37
monobasic, ctns., c.l. lb .33 - —
l.c.l. lb. .34 - .37
tribasic ctns., c.l. lb. .33 - —
l.c.l. lb. .34 - .37

Aluminum sulfate, com'l, bulk, c.l., works 100 lbs. 1.85 - —
ground, bgs., works ton.37.00 - —
lump, bgs., works ton.40.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.55 - —
l.c.l., works, frt. equald 100 lbs. 3.95 - —
USP, gran., dms., works lb. .12 - .15
powd., dms., works lb. .14 - .16
Trihydrate heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 8.00 - 10.00
Aminoazotoluene, tech., bbls lb. 1.03 - 1.18
o-Aminobiphenyl, dms., c.l., works, lb. .32½ - —
l.c.l., works lb. .33 - —
tanks, works lb. .31 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .46½ - —
l.c.l., dlvd. lb. .45 - —
tanks, dlvd lb. .45 - —
2-Amino-2-methyl-1-propanol, cns., dms., works lb. .60 - —
m-Aminophenol, distilled, dms, ton lots lb. 2.05 - —
smaller lots lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb. .97 - .98
Aminophylline, USP, 100-lb. dms lb. 3.55 - —
Aminopyrine, USP, bots., dms lb. 4.75 - —
Ammonia, anhyd., fertilizer, tanks, works ton.85.00 - 88.00
pure cyls., extra, zone 1 lb. .18½ - —
2 lb. .19 - —
3 lb. .19½ - .20
4 lb. .20 - —
5 lb. .21 - —
refrigeration tanks, works ton.87.50 - 90.50
Aqueous (29.4% NH_3), dms., c.l., dlvd., Met area 100 lbs. 3.60 - —
l.c.l., works 100 lbs. 4.00 - —
tanks, works, anhyd. basis. ton.96.00 - —

Alcohol, 2-Ethylbutyl — Ammonium Sulfide

Ammoniac, sal, gray, bgs., c.l., works, frt equald 100 lbs. 8.25 - —
l.c.l., same basis 100 lbs. 8.65 - 11.15
white, gran. (see Ammonium chloride, tech.)
Ammoniacal liquor, tankcars, works, anhyd. basis ton.96.00 - —
Ammonium acetate, purified, dms. lb. .38 - —
Benzoate, USP, dms. kgs. 4,000 lb lots frt. alld lb. .80 - —
smaller lots, frt. alld lb. .81 - 1.08
Biborate, bbls., c.l., works ton.312.00 - —
ton lots ex whse ton.375.00 - —
smaller lots, ex whse ton.380.00 - —
Bicarbonate, dom., dms., c.l., works 100 lbs. 6.50 - —
l.c.l., works 100 lbs. 7.50 - —
imported dms. (cs.) lb. .07¼ .08½
Bichromate, dms., works lb. .42 - .43
Bifluoride, dms., dlvd. lb. .2145 - .2245
Bromide NF, gran. bbls lb .38 .39
dms. lb. .39 - .42
Powdered ammonium bromide 10c per lb higher
Carbonate, USP, lump, powd., dms lb. .23 .24
Chloride, tech., white granular, bgs., c.l., works 100 lbs 5.25 - —
l.c.l., works 100 lbs. 7.00 - —
USP, gran., bbls., dms lb. .17¼ - —
Citrate, dibasic bbls lb. .75 - —
dms lb. .80 .85
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia, aqueous).
Hypophosphite, NF, dms lb. 2.40 - —
Iodide, NF, dms., bots lb. 4.26 - 4.38
Linoleate, 80% dms. works lb. .50 - .55
Nitrate, fertilizer grade Canadian eastern, 32.5% N, bgs., c.l., shipping point ton.77.50 - —
western, 33.5% N., bgs., f.o.b. cars, Los Angeles ton.89.84 - —
Ammonium nitrate, fertilizer grade, domestic, bgs., western, 33.5%N, works ton.68.00 - 70.00
with dolomite, 20.5% N. bgs., Hopewell, Va ton 51.00 —
Oxalate, fine gran., dms lb. .26½ - .31
Pentaborate, gran., bbls., c.l., works ton.222.00 —
ton lots, ex whse ton.285.50 —
smaller, lots, ex whse ton.290,00 - —
Ammonium pentaborate powder, $10 per ton higher
Perchlorate, kgs., works lb. .50 - .75
Persulfate, kgs lb. .38 —
Phosphate, com'l, bgs., c.l., works, frt. equald lb. .0865 - —
l.c.l., same basis lb .09 —
dibasic, NF V bots., dms lb. .45 —
tech., bgs., c.l works, frt. equald lb. .0865 - —
l.c.l., same basis lb. .0915 - —
Salicylate, NF, dms., kgs lb. 1.62 1.64
Silicofluoride dms. works lb. .11 .12
Sulfamate, bbls., dms., works lb. .18 .20
Sulfate, coke-oven, bulk, producing ovens ton.44.00 - 47.00
synthetic, bgs., c.l., western, works ton.49.50 - —
bulk, works ton.45.00 - —
purified, dms., works lb .08½ - .10
Sulfide, liq., 40-44%, dms., c.l., frt. equald., 100% basis. ton.240.00 - —
l.c.l., 100% basis, works. ton.300.00 - —
tanks, frt. alld ton.180.00 - —

For suspension control, flatting and washability

WITCO ALUMINUM STEARATES*

Witco manufactures just the type of aluminum stearate you need for close control of viscosity and suspension. Moreover, the matte surface produced by certain grades can be beautifully high-lighted by rubbing to a glossy finish.

	#132	#16	#18	#22	#36
Type of soap	Tri	Di-Tri	Di	Di	Mono
Softening point, °C	109–118	121–133	131–159	150–170	165–170
Gelation	Slight	Medium	Medium	Heavy	Medium
Analysis (typical):					
Acetone extractable, %	29.5	15.9	8.9	5.7	3.5
Total ash, %	6.1	7.1	8.4	9.1	12.6
Moisture, %	0.5	0.5	0.5	0.5	0.5
Water soluble salts, %	0.1	0.2	0.2	0.2	0.5

*Manufactured by Witco at its Chicago and Brooklyn plants.

Our Technical Service Laboratory will be glad to work with you on special problems.

CHEMICAL PROGRESS WEEK-MAY 9-22

WITCO PLANTS AND PRODUCTS

Sunray, Texas • Carbon Black
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Perth Amboy, New Jersey • Asphalt
Brooklyn, New York • Stearates, Vinyl Stabilizers
Chicago, Illinois • Stearates, Esters, Driers, Vinyl Stabilizers, Plasticizers, Mastics, Organic Chemicals
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Ponca City, Oklahoma • Furnace Blacks
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Eunice, New Mexico • Carbon Black

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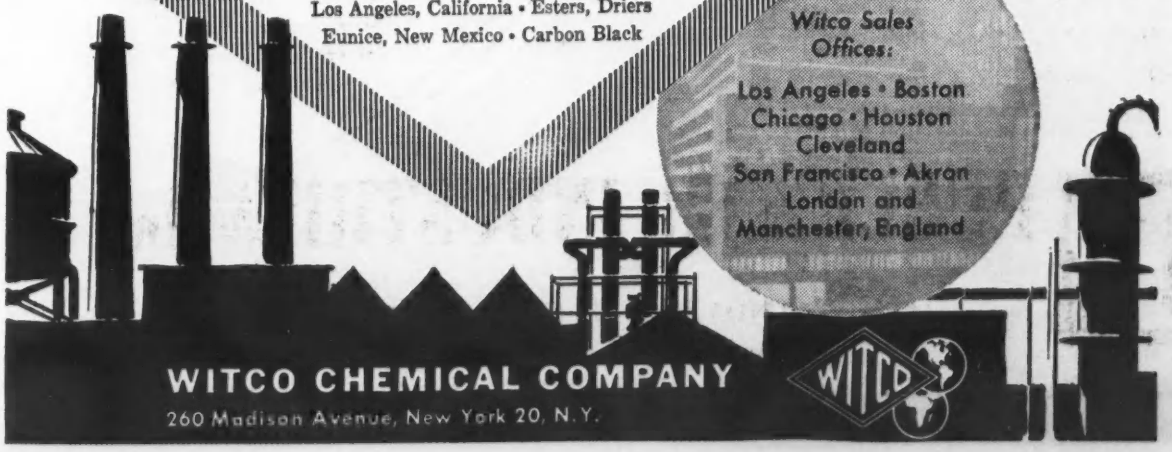
Manchester, England



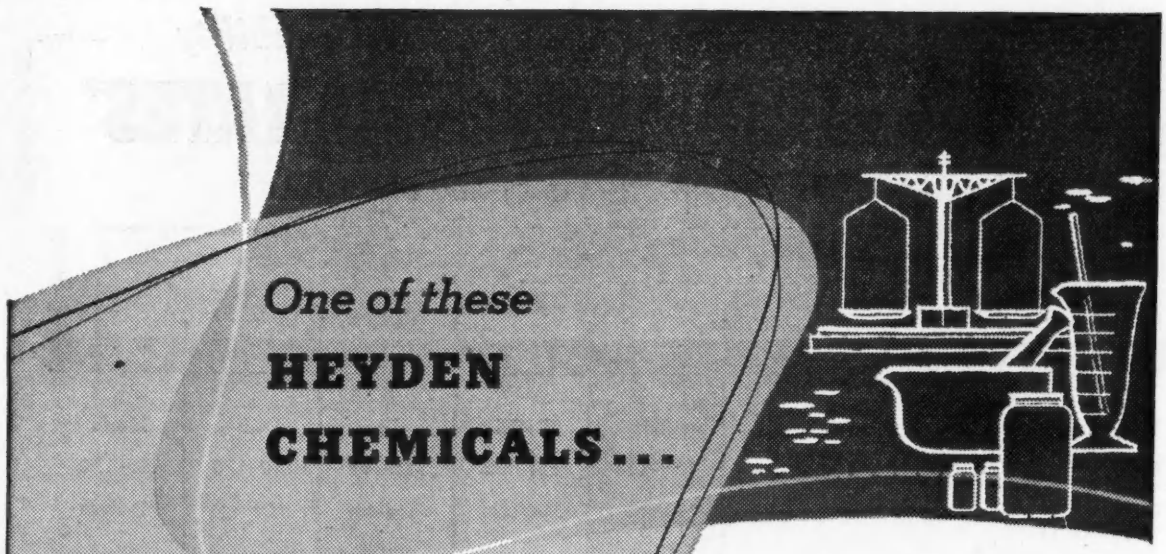
WITCO CHEMICAL COMPANY
260 Madison Avenue, New York 20, N.Y.

Ammonium Sulfocyanide—Bismuth Subgallate

Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .20 - —
l.c.l., works lb. .22 - .28
Thioglycollate, com'l, cbys., 100% basis lb. 1.60 - —
highly purified, cbys., 100% basis lb. 1.70 - 1.96
Thiosulfate, cryst., photo grade, fib dms., frt. alld lb. .65 - —
60% solution, dms., c.l. works. lb. .06½ —
d-Amphetamine hydrochloride di-basic, bots lb. 28.00 - —
dl, dms lb. 6.00 - —
d-monobasic, bots lb. 28.00 - —
d-Phosphate, dibasic, bots lb. 28.00 - —
dl, dms lb. 6.00 - —
d-Sulfate, dms lb. 28.00 - —
dl, dms lb. 6.00 - —
Amyl acetate, ex fusel oil, tech., frt. alld. E. of Rockies lb. .17 - —
l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
ex pentane, regular, dms., c.l., dlvd lb. .17 - —
l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
technical, dms., c.l., dlvd lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
Alcohol (see Alcohol amyl).
n-Butyrate, dms lb. .90 - 1.25
Cinnamic aldehyde, dms lb. 1.70 - 2.00
Nitrite, USP, bots lb. 1.75 - 1.83
Salicylate, cns., dms lb. .74 - 1.05
o-tert-Amyl phenol, dms., c.l., works. lb. .43¾ - —
l.c.l., works lb. .46¾ - —
tanks, works lb. .41¾ - —
p-tert-Amyl phenol, dms., c.l., works, lb. .26½ - —
l.c.l., works lb. .27½ - —
tanks, works lb. .25½ - —
Anethole, NF, cns., dms lb. 1.25 - 1.55
tech., dms lb. .75 - 1.20
Angelica root, dom., bls lb. .60 - .70
Aniline oil, dms., c.l., works, frt. alld. lb. .21 - —
l.c.l., works, frt. alld lb. .22 - —
tanks, works, frt. alld. lb .20 - —
Salt, dms, frt alld lb 33 - —
Anise, Mexican, bgs lb. .24 - —
Spanish, bgs. lb. .28 - —
Syrian lb. .21 - .22
Anisic aldehyde, bots., dms lb. 1.80 - 2.70
o-Anisidine, dms., works lb. .88 - —
p-Anisidine, dms., works lb. .97 - —
Annatto seed, whole, bgs. lb .24 - —
powdered dms lb. .28 - —
Anthracene 96-95% bbls, ton-lots, works lb. .70 - —
smaller lots, works lb. .95 - —
Anthraquinone, 99.5%, bbls., frt. alld lb. .88 - —
Antimony butter (see Antimony trichloride)
Metal, bulk, c.l., mines lb. .28½ - —
cases, c.l., mines lb. .29 - —
Oxide, bgs., c.l., frt. alld lb. .26 - —
l.c.l., frt. alld lb. .27½ - —
Sulfide, approx. 60%, bgs., dlvd. lb. .27 - .30
Trichloride, anhyd., pails, c.l., works lb. .38½ - —
l.c.l., works lb. .40½ - —
Antimony potassium tartrate, tech., gran. or powd., dms lb. .56 - .59
USP, powd., dms lb. .61 - .62
Antipyrine, NF, dms lb. 2.50 - 2.70
Apomorphine hydrochloride, USP, bots oz. 23.40 - 23.90
Areca nuts, powd., bbls lb. .15 - .16
Arecoline hydrobromide, NF, bots. tins oz. 4.50 - 6.00
l-Arginine monohydrochloride, dms., 1-kilo lots kilo. 77.00 - —
Argols, min 50% bgs shipment ports per 100 kilos, 100% basis 19.50 - —
Arnica flowers (true montana), bls. lb .70 - .71
Arsenic metal, lump, bbls., prompt ship't lb. .60 - —
Trioxide, USP, dms lb. .48 - —
White powd., bbls., c.l., dlvd lb .05½ - —
l.c.l. dlvd lb. .06½ - .07½
Asafetida, cs. lb. .36 - .39
powd., bbls., dms lb. .50 - .53
Asbestine (see Talc fibrous, N. Y.)
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines ton. 1,300.00 - —
No. 2, c.l. (20 tons), mines ton. 675.00 - —
Run-of-mine, c.l., (20 tons), mines ton. 556.00 - —
3K, c.l. (20 tons), mines ton. 436.00 - —
3R, c.l. (20 tons), mines ton. 371.00 - —
3T, c.l. (20 tons), mines ton. 346.00 - —
3Z, c.l. (20 tons), mines ton. 321.00 - —
4K, c.l. (20 tons), mines ton. 173.00 - —
4M, c.l. (20 tons), mines ton. 173.00 - —
4T, c.l. (20 tons), mines ton. 156.00 - —
4Z, c.l. (20 tons), mines ton. 156.00 - —
5D, c.l. (20 tons), mines ton. 122.50 - —
5K, c.l. (20 tons), mines ton. 122.50 - —
5M, c.l. (20 tons), mines ton. 116.50 - —
5R, c.l. (20 tons), mines ton. 110.00 - —
6D, c.l. (30 tons), mines ton. 78.00 - —
7D, c.l. (30 tons), mines ton. 68.50 - —
7F, c.l. (30 tons), mines ton. 65.00 - —
7H, c.l. (30 tons), mines ton. 55.00 - —
7K, c.l. (30 tons), mines ton. 46.00 - —
7M, c.l. (30 tons), mines ton. 40.00 - —
7R, c.l. (30 tons), mines ton. 39.00 - —
7T, c.l. (30 tons), mines ton. 37.00 - —
Asbestos, Canadian, crude, 7RF, c.l., (30 tons), mines ton. 40.00 - —
7TF, c.l. (30 tons), mines ton. 40.00 - —
8S, c.l., (30 tons), mines ton. 27.00 - —
Asbestos c.l. prices are in U. S. funds. L.c.l. lots, $4 per ton higher.
Asphalt, gilsonite, black, jet, bgs., c.l., mines ton. 37.00 - —
select, 350°F., fusing point, bgs., c.l., mines ton. 38.00 - —
270°-295°F. fusing point bgs., c.l., mines ton. 37.00 - —
seconds, 300°-390°F. fusing point, bgs., c.l., mines ton. 32.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼ - —
Petroleum, cut-back, tanks, tank-wagon, refinery gal. .09 - —
emulsion, tanks, tank wagon, refinery gal. .09½ .10
steam-refd., less than 80 penetration, tanks, tankwagon, refinery ton 22.00 - —
80-300 penetration, tanks, tank-wagon, refinery ton. 21.00 - —
Aspirin (see Acid, acetylsalicylic).
Atropine, USP, bots. oz. 7.00 - 8.00
Sulfate, USP, bots. oz. 4.00 - 5.00

B

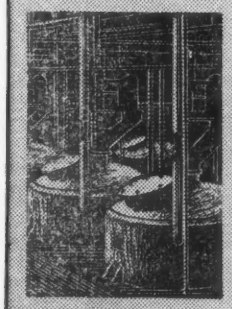
Bacitracin, bulk, 1,000,000 or more units 50,000 units. .70 - —
less than 1,000,000,000 units 50,000 units. .75 —
Balm of Gilead buds, dried, bgs lb. 1.35 - 1.45
Barberry root, bark, bags lb. .28 - .30
Barbital, USP, 100-lb. dms lb. 4.50 - —
Sodium, USP, dms lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works ton. 92.50 - —
smaller lots works ton. 102.50 - —
Chlorate, kgs., works lb .32 - .36
Chloride, anhyd. bgs., c.l., works. ton. 158.00 - —
l.c.l., works ton. 168.00 - —
crystals, tech., dms., c.l., works. 100 lbs. 6.00 - —
l.c.l., works 100 lbs. 6.50 - —
NF, cryst., dms lb. .18 - —
Chromate, bgs., frt. equald lb. .35 - —
Dioxide (see Barium peroxide).
Hydrate, crystals, bgs ton. 190.00 - 200.00
Monoxide (see Oxide).
Nitrate, bbls., c.l., works lb. .12½ - —
l.c.l., works lb. .14 - —
Oxide, grd., dms., c.l., frt. equald. ton. 255.00 - —
l.c.l., works ton. 265.00 - —
Peroxide, dms., works lb. .16 - —
Stearate, cns., c.l., frt. alld lb. .37 - —
l.c.l., same basis lb. .38 - .42
Sulfate, tech. (see Barytes and Blanc fixe).
X-ray, dms lb .14 - .14½
Sulfide, dms., c.l., works ton. 85.00 - —
l.c.l., works ton. 95.00 - —
Barytes, Southern off-color, bgs., mines ton. 25.00 - —
95.75%, bgs., mines ton. 25.00 - —
water-grd., paper bgs., c.l., E. St. Louis ton. 41.60 - —
ex-whse., N. Y. ton. 60.10 - —
Bauxite, bulk, mines ton. 9.50 - 10.00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls lb. .28 - .33
root, bls lb. .45 - .50
Bentonite, dom., 200 mesh bgs., c.l., mines ton. 14.00 - —
imported, Italian, white high gel., bgs., 5 ton-lots, ex-whse ton. 80.60 - —
1 ton-lots, ex whse ton 83.10 - —
low gel, bgs., 5 ton-lots, ex whse ton. 78.95 - —
1 ton-lots, ex whse ton. 81.45 - —
Benzal chloride, cbys., works lb. .22 - .23½
Benzaldenyde, NF, dms lb. .74 - 1.05
tech., cbys., dms lb. .44 - —
Benzene (see Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane).
tech., bgs., dms., c.l., works, gamma unit-lb. .009 - .01
l.c.l., works, gamma unit-lb. .015 - —
wet dust, distributors, dms., c.l., dlvd., gamma unit lb. .02 - —
l.c.l., dlvd., gamma unit-lb. .021 - —
Benzidine hydrochloride, bbls., frt. alld., 100% basis lb. 1.00 - —
Benzocaine, dms lb. 3.48 - 3.50
Benzol, pure or nitration, tanks, works
Bethlehem, Pa. gal. .40 - —
Birmingham district gal. .40 - —
Chicago district gal. .40 - —
Cleveland district gal. .40 - —
Geneva, Utah gal. .40 - —
Johnstown, Pa. gal. .40 - —
Lackawanna, N. Y. gal. .40 - —
Lone star, Texas gal. .40 - —
Lorain, Ohio gal. .40 - —
Minnequa, Colo gal. .39 - —
Philadelphia district gal. .40 - —
Pittsburgh district gal. .40 - —
Sparrows Point, Md. gal. .40 - —
Syracuse, N. Y. gal. .40 - —
Terre Haute, Ind. gal. .40 - —
Youngstown, Ohio gal. .40 - —
Benzophenone dms lb. 1.40 - 1.70
Benzonitrile, dms., c.l., works lb. .46¾ - —
l.c.l., works lb. .47 - —
Benzotrichloride, cbys., frt. equald. lb. .18 - .20
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .21½ - .24½
l.c.l., same basis lb. .22½ - .25½
Peroxide, pure, fib. ctns., works. lb .90 - 1.05
Benzyl acetate, f.f.c., cns., dms. lb. .62 - 1.04
Alcohol (see Alcohol, benzyl).
Benzoate, USP, f.f.c., cns., dms. lb. .62 - 1.10
Chloride, tech., cbys., dms., c.l., works, frt. equald. lb. .20½ - .23½
l.c.l., same basis lb. .21½ - .24½
High grade benzyl chloride, 2c. higher.
Cinnamate, cns. lb. 3.35 - 3.90
Formate, cns. lb. 1.30 - 2.10
Propionate, bots. lb. 1.35 - 1.65
Salicylate, bots. lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.68 - 1.80
Chloride (see Benzal chloride).
Benzyl isoeugenol, cns lb. 8.60 - 9.10
Berberine bisulfate, cns lb. 35.20 - 36.25
Hydrochloride, bots lb. 35.00 - 36.25
Betagammapicoline (see b,g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride, technical).
Biotin cryst., bots gram. 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, jars lb. 5.11 - —
Hydroxide, dms. lb. 4.65 - —
Metal, bxs., ton lots lb. 2.25 - —
Nitrate, cryst., dms lb. 2.10 - —
Oxide, anhydrous, dms lb. 4.47 - 5.05
Oxychloride, dms. lb. 4.37 - 4.42
Phenolsulfonate, fib. dms lb. 5.22 - —
Subcarbonate, USP, dms lb. 3.20 - —
Subgallate, NF, fib. dms lb. 3.15 - —



...may help you make a GOOD product BETTER

The Heyden products listed here have long been recognized for their high purity and uniformity by production and research men in the drug, pharmaceutical and process industries. One of these chemicals may be the intermediate you need to give your product better quality and sales appeal. Samples and further information are available upon request.

Benzaldehyde
Benzilic Acid
Benzyl Chloride
Benzoates
Bromides
Creosotes
Formaldehyde
Glycerophosphates
Guaiacols
Methenamine
Parasepts®
Propyl Gallate
Resorcinol
Saccharin
Salicylamide
Salicylates
Tolyl Aldehyde



HEYDEN CHEMICAL CORPORATION
342 Madison Avenue · New York 17, N. Y.
CHICAGO · CINCINNATI · DETROIT · PHILADELPHIA · PROVIDENCE · SAN FRANCISCO

FINE HEYDEN CHEMICALS

Bismuth subiodide, fib. dms....lb. 5.37 - —
Subnitrate, NF, dms .....lb. 2.65 - —
Subsalicylate, USP, dms.....lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Black, acetylene, bgs., c.l., works.lb. .17 - —
cs., l.c.l., ship't point .....lb. .22½- .26
Ash (see Barium Sulfide).
Bone, dms., l.c.l., frt. alld.....lb. .15½- .22
Pacific coast bone black prices, 2c. per lb higher
Carbon, channel, pigment, high color, beads, ctns., c.l., works. lb. .72 - —
l.c.l., dlvd. or whse.lb. .78 - —
medium color, uncompressed, bgs., c.l., works lb. .12 - —
l.c.l., dlvd. or whse.lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works..... lb. .074 - —
l.c.l., works ..... lb. .1225- —
furnace fast extruding, bgs., c.l. works lb .06 - —
ctns., l.c.l., whse .....lb. .10 - —
high abrasion, bulk, c.l., works lb .0750 - —
bgs., c.l., works lb .0790- —
l.c.l., dlvd or whse lb. .122 .125
high modulus, bgs., c.l., works. lb. .0550- —
ctns., l.c.l., whse lb. .0950- —
semi-reinforcing bgs., c.l., works lb. .045 - —
bgs., cns., l.c.l., whse lb. .085 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works, lb. .12¾- —
l.c.l., works ..... lb. .13 - —
Lamp, bgs., c.l., works.....lb. .16 - .45
Mineral, bgs., works .....lb. .0160- .0675
Blackberry root bark, bls.....lb. .50 - —
Black haw root bark, bls.....lb. .65 - .70
tree bark, bls .....lb. .40 - .45
Blanc fixe, dry, byproduct, bgs., c.l., works. ton.190.00 - —
l.c.l., works ..... ton.200.00 - —
direct process, bgs., c.l., works. ton.100.00 - —
l.c.l., works .....ton.110.00 - —
N. Y. whse .....ton.140.88 -165.00
pulp, 70%, bbls., c.l., works. ton.105.00 - —
l.c.l., works ..... ton 115.00 - —
Bleaching powder, dms., c.l., works. 100 lbs. 5.02 - —
l.c.l., works ..... 100 lbs. 6.52 - —
blood, dried, 16-16½% ammonia, bgs. unit-ton. 8.50 - —
high-grade unground, 15-17% ammonia, bgs., Chicago. unit-ton. 9.00 - —
soluble bgs., c.l. ..... lb. .16½- .18
l.c.l. ..... lb. .17½- .25
Bloodroot, bls..... lb. .60 - .65
Blue alkali, dry, bbls., dlvd. N. or Tenn. and N. C., E. of Miss R. including St Paul Minneapolis, Davenport, Rock Island, St. Louis lb. 2.00 - —
toner bbls. tithe flushed same basis lb. 1.15 - —
Chinese, bbls., same basis .... lb. .48 - —
Cobalt, genuine, bbls., same basis lb. 4.90 - —
Imitation (see Blue ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese, Milori, Potash, Prussian and Soda).
Methyl violet toner, molybdated, PMA, bbls., same basis lb. 2.60 - —
tungstated, PTMA, bbls., same basis lb. 3.85 - —
Milori, bbls., same basis .... lb. .48 - —
Peacock, fugitive, 100% color strength, bbls. same basis lb .75 - —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls. same basis lb. .56 - —
Prussian, insoluble, bbls., same basis lb. .48 - —
soluble, bbls., same basis lb. .48 - —
Soda, CP, bronze, bbls., same basis lb. .56 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .30½- .35
jobbing types, bbls., same basis. lb. .16½- .18½
regular types, dry bbls. same basis lb. .22½- .35
Victoria toner, molybdic, PMA, bbls lb. 4.10 - —
tungstated, PTMA, bbls .....lb. 5.00 - —
Blue dry colors, dlvd prices ¼c higher Ala., Fla., Ga., La. (Shreveport, 1¼c), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1 6c higher, Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita frt. equalized with Chicago
Blue vitrol (see Copper sulphate).
Bluestone (see Copper sulphate).
Bonemeal, steamed, works, E..ton.62.00 - —
Bone phosphate, defluorinated (see D), of lime (see Calcium phosphate, tribasic) precipitate, (see Calcium phosphate tribasic, NF precip.).
Borax, tech., anhyd., bgs., c.l., works. ton.78.00 - —
ton lots ex whse, N. Y. or Chicago..ton.125.75 - —
bulk, c.l., works ton.70.00 - —
crystals, 99%, bgs., c.l., works. ton.67.25 - —
ton lots, ex-whse., N. Y. or Chi ton.115.00 - —
smaller lots, same basis. ton.120.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton.41.25 - —
ton lots, ex whse., N. Y. Chi ton.89.00 - —
smaller lots, same basis. ton.94.00 - —
bulk, c.l., works .... ton.35.75 - —
pentahydrate, 99½%, bgs., c.l., works ton.55.50 - —
ton lots, ex whse, N.Y., Chi ton.108.25 - —
smaller lots, same basis. ton.103.25 - —
powder, 99½%, bgs., c.l., works ton.46.25 - —
ton lots, ex-whse., N. Y. or Chi. ton.94.00 - —
smaller lots, same basis. ton.99.00 - —
Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. point..lb. .18 - .24
l.c.l., same basis.....lb. .19 - .26
Borneol, cns. .....lb. 2.50 - 4.50
Borontrifluoride gas, cyls., truckload, works. lb. .62 - —
less truckload, works.....lb. .70 - —
Brazilwood extract (see Hypernic extract)
Brimstone (see Sulfur).
Bromine, purified, cs., c.l., dlvd. E. of Rockies lb. .27 - —
l.c.l., up to 1,000-lb. lots, same basis lb. .29 - —
dms. lead-lined, dlvd ..... lb. .34 - —
Bromoform, pharmaceutical grade. bots lb 1.62 2.60
cbys. ..... lb 1.52 —
Bromstyrol bots ..... lb 5.40 5.70
Bronze powder aluminum (See A).
Brown iron oxide, pure, bgs., c.l., works lb. .13¾- —
l.c.l., works lb. 14 - —
Oxide, metallic, bgs, works .. lb. .04 - —
Sienna, burnt, paper bgs., c.l., works lb. .04¼- .15¼
l.c.l. works lb 04½ 15½
raw, paper, bgs. c.l. works lb 04½ 13
l.c.l. works lb 04¾ 13¼
Umber, burnt, American, bgs., c.l., works lb. .06 - —
l.c.l., works lb .06¼ .07
Turkey type bgs c.l. Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .06¾ —
l.c.l., works lb. .07 —
raw, American bgs works lb 06¼ 06½
Turkey-type bgs., works lb .06¾ 07
Vandyke bbls. works lb 09½ 12
Brucine, cns., 100-oz lots oz. .20 .35
Sulfate, NF, cns., 100-oz. lots lb. .15 - .30
Buchu leaves, bls ..... lb. .50 - —
Butadiene, refined, cyls, refinery lb .22 - —
tanks, refinery lb .15 - —
Butane, indust., tanks, group 3 gal. .03 - —
n-Butyl acetate, fermentation, dms., c.l., frt. alld lb. .15 - —
l.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .13 - —
Butyl acetate, n-synthetic, dms., c.l., dlvd. E. lb. .15 - —
l.c.l., same basis..... lb. .16 - —
tanks, same basis..... lb. .13 - —
sec-synthetic, dms., c.l., dlvd. E. lb. .12½- —
l.c.l., same basis..... lb. .13¼- —
tanks, same basis..... lb. .10¾- —
Alcohol (see Alcohol n-Butyl).
Aldehyde (see Butyraldehyde).
Chloride, dms., c.l., works..... lb. .37½- —
t.c.l. works lb. .38 - —
n-Ether, dms., c.l., works..... lb. .31½- —
l.c.l., works..... lb. .32 - —
tanks, works ..... lb. .30 - —
Lactate, dms., c.l., frt. alld. E. of Rockies lb. .35 - —
l.c.l., same basis..... lb. .36 - —
tanks, same basis ..... lb. .33 - —
Laurate, dms., works..... lb. .39 - —
Methacrylate normal, dms. less truckloads works lb. .70 - —
Oleate, refd., dms., l.c.l., works.lb. .32 - —
Phenylacetate dms lb 4.50 4.60
Phthalate (see Dibutyl phthalate).
Stearate, dms. l.c.l., frt equald lb. .24 - .27
Butylamine (see mono-di-, and tri-).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .49 - —
l.c.l., works..... lb. .50 - —
tanks, works..... lb. .48 - —
p-tert-Butylphenol, bgs., c.l., works. lb. .25½- —
l.c.l., works..... lb. .26½- —
Butyraldehyde, dms., c.l., dlvd. lb. .21½- —
l.c.l. dlvd..... lb. .22½- —
tanks, dlvd..... lb. .19½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter)
Cadmium iodide, jars lb 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, natural, USP, cryst., dms., 100-lb. lots or more lb. 2.65 - —
anhydrous, dms ..... lb. 2.85 - —
synthetic USP cryst., dms., 100 lb. lots or more lb. 2.65 - —
anhydrous, dms., 100 lbs. or more lb. 2.85 - —
citrated, USP, dms., 100-lb. lots or more lb 2.65 - —
Calamine, USP, dms..... lb. .34 - —
Calciferol cryst., vials, 1 kilo lots, works gram. .75 - —
25 to 100 gram lots, works. gram. .80 - .90
in edible oil (see Viosterol).
Calcium p-aminosalicylate, fib., dms., 1,000 lb. lots, frt. adj. lb. 7.00 - —
smaller lots, same basis .. lb. 7.05 - 7.50
Arsenate, dealers, dms., c.l., whse works, frt alld on 96 lbs or over lb. .09 - .10
l.c.l., same basis ..... lb. .10 - —
Bromide NF, jars lb. .92 - .94
Carbide, standard generator size, dms. c.l. dlvd ton.134.40 - —
Carbonate, natural, dry-grd., air floated, 99.5%—325 mesh, bgs., c.l., works ton. 7.50 - 10.00
chalk, whiting, 325 mesh, bgs., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00

28,601 Years of Chemical Experience

The skills acquired through experience are happily blended with the vigor and ambitions of youth throughout the Columbia-Southern organization. ¶ Nearly a third of all Columbia-Southern personnel have been with the company from ten to forty-five years. In the aggregate, the Columbia-Southern staff has had 28,601 years of experience! These people know the chemical business—and they understand the requirements of customers. ¶ Equally important, however, are the many fine younger members of the Columbia-Southern organization whose developing talents and abilities are assurance of continuing progress and adherence to high standards through the years ahead.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

Calcium Carbonate, Precip.—Chloroform

Calcium carbonate, precip., dense, bgs., c.l., works ton 30.00 -33.00
t.c.l., works ton 40.00 -48.00
medium, bgs., c.l., works ton 35.00 - —
t.c.l., works ton 45.00 -50.00
surface treated, bgs., c.l., works ton 35.00 -50.00
t.c.l., works ton 45.00 -65.00
ultrafine, bgs., c.l., works ton 110.00 -160.00
t.c.l., works ton 120.00 -175.00
Chloride, cryst., purified, dms lb. .27 - —
flake 74-80% paper bgs., c.l. works, frt. equald ton 27.00 - —
liquor 40%, tankcars works frt. alld ton 11.35 - —
pellets, bgs., c.l., works ton 33.00 - —
powder, bgs., c.l., works ton 37.65 - —
solid, 73-75% dms c.l., frt equald ton 25.50 - —
t.c.l. works, same basis ton 34.00 -71.00
USP, gran., dms lb. .40 - —
Chromate bgs. frt equald lb. 29½ - .30
Cyanide dms. dlvd E of Rockies, lb. .24 - .50
Gluconate, AA bbls., dms lb. .70 - .72
USP, bbls. dms lb. .63 - .65
Glycerophosphate, NF, fib. dms lb. 2.30 - 2.45
Hydride, dms., works lb. 2.20 - 4.00
Hypochlorite, high test, cased (45 lbs.), dlvd. E of Rockies cs. 22.60 -24.75
dms., 100-lb., same basis dm. 28.65 -32.50
Hypophosphite, dms., ton lots or less lb .90 - .93
Iodide, jars m 4.53 - —
Lactate, USP, dms., 10,000-lb. lots or more, works lb. .40 - —
smaller lots, works lb. .41 - .48

Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
Naphthenate, liq., 4% Ca, dms., frt equald lb. .27¼- —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton 48.00 - —
tech., dms., works lb. .13 - —
d-Pantothenate, jars, 100-gram lots or more, frt. adjusted, gram .07½- —
Para-aminosalicylate (see Calcium p-Aminosalicylate).
Phenolsulfonate, dms. lb. .70 - —
Phosphate, dibasic, USP, bgs., c.l., 100 lbs. 7.10 - —
t.c.l 100 lbs. 7.60 - 7.95
feed grade, bgs., c.l., works, ton 74.00 -84.00
t.c.l., bgs., works ton 85.00 -95.00
monobasic, bgs., 10,000-lb. lots, works, frt. equald 100 lbs. 6.05 - —
smaller lots, same basis, 100 lbs. 6.55 - —
tribasic, precip., NF, bgs., c.l., works 100 lbs. 7.60 - —
t.c.l., works 100 lbs. 7.95 - —
Phytate, bgs., works lb. .37 - —
Resinate, precip., dms., frt. alld., works lb. .27¾- —
Silicate, hydrated, bgs., c.l., works, lb. .06 - —
t.c.l., works lb. .06½- —
Stearate, ctns., c.l. lb. .35 - —
t.c.l. lb. .36 - .40
Sulfate (see Gypsum).
Calcium-strontium sulfide, phosphorescent steel pails, 100 to 999 lb lots, works lb. 2.60 - 3.50
fine particle size, same basis, works lb. 2.65 - 3.75
Calomel, USP, powd., dms lb. 4.57 - —

Camphene 46° m.p., dms., incl., c.l., works lb. .10½- —
l.c.l., same basis lb. .12 - .20
tanks, same basis lb. .08 - —
Chlorinated, 67-69% (see Toxaphene).
Camphor monobromated, NF, dms., kgs lb. 3.00 - 3.12
natural, USP, powd., bbls., 100-lb. lots lb. .51 - .53
tablets 1-oz. ½-oz. cs lb. .63 - .65
synthetic, tech., 1 bbl. or more lb. .49 - —
USP, gran., powd., bbls, 2,000-lb. lots lb. .54 - —
1,000-lb. lots lb. .55 - —
smaller lots lb. .56 - —
tablets, tins, 2,000-lb. lots lb. .85 - —
1,000-lb. lots lb. .86 - —
smaller lots lb. .87 - —
Canada balsam (see Fir balsam).
Cantharides, Chinese, cs lb 2.00 - 2.05
powd., bxs. lb 2.25 - 2.30
Russian, bgs. lb 4.00 - 4.05
powd. bxs. lb 4.35 - 4.40
Capsicum (see Pepper, red).
Oleoresin NF from domestic pepper, dms. lb. 4.50 - 5.25
from African pepper, dms. lb. 4.35 - 5.00
Caraway seed, Dutch, bgs. lb. .16 - .16¼
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbinol, methyl isobutyl (see Methyl isobutyl-carbinol).
Carbon dioxide, industrial, wholesale, bulk ton 73.00 -115.00
cyls. lb. .08 - —
solid lb. .035 - .040
Disulfide, 55-gal. dms., c.l., works, frt. alld. to competitive points lb. .0750- —
l.c.l., same basis lb. .0850- —
5-gal. dms., c.l., same basis lb. .1025- —
l.c.l., same basis lb. .1125- —
tanks, same basis lb. .0525- —

Carbon tetrachloride, CP, dms., works lb. .11 - .13¾
NF, chys lb. .17 - .18
tech., dms., c.l., E. of Rockies, frt. alld lb. .0925- —
W. of Rockies, f.o.b., stockpoints lb. .0975- —
l.c.l., E. of Rockies, frt. alld, alld lb. .115 - —
W. of Rockies, f.o.b. stockpoints lb. .12 - —
tanks, E. of Rockies, frt. alld. lb. .0825- —
W. of Rockies, f.o.b. stockpoints lb. .12 - —
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb. 4.00 - 4.25
smaller lots, works lb 4.10 - 4.75
Cardamom fruit, fancy, bleached, A., cs lb. 3.95 - —
medium, cs lb. 3.70 - —
decorticated, Alleppey, cs lb. 1.90 - —
Guatemalan, cs. lb. 1.90 - —
green, Alleppey, bgs lb. 1.85 - —
Ceylon, bgs lb. 1.85 - —
seed (see Cardamom fruit decorticated).
Carmine, No. 40, NF, bulk, 100 lb. lots or more, dlvd lb. 6.50 - —
smaller lots, dlvd lb. 6.65 - 7.15
Carotene, technical, 1,350,000 A units per gram tins, works gm. .55 - —
in carrot oil 5,000,000 to 8,000,000 A units per lb dms., works, million units. .18 - —
microcrystalline in oil 400,000 A units per gram tins, works, million units. .33 - —
Carvol, bots lb. 4.75 - 9.65
Cascara sagrada bark, bulk lb. .36 - —
Casein, dom., acid precip., standard, bgs. 10,000-lb lots or more, ship't point lb. .27 - .30
premium bgs 5,000-lb lots or more, ship't point lb. .35 - .40
imported, Argentine acid precip., grd., 100-kg. lots or more, duty paid lb. .22 Nom.
Cashewnut shell liquid, treated, dms., c.l., Newark, N J lb. .22 - —
ton lots, same basis lb. .23 - —
dm. lots, same basis lb. .25 - —
Cassia, Batavia, cuttings, bls lb. .14¾- .15
longstick, cracked, bls lb. .16½- .17
shortstick, cracked, bls lb. .15½- .16
Saigon, broken, bls lb. Nominal
medium, bls. lb. .85 - —
thin, bls. lb. .90 - —
Castor beans, bgs., f.o.b. Brazilian ports long ton 105.00 -110.00
Oil (see Oil, castor).
Pomace, bgs., c.l., works ton 27.00 - —
natural, ctns lb. 5.00 -30.00
Catechol, CP, cryst., fib. dms., works lb 2.17½- —
resublimed, dms., works lb. 4.29½- —
Catnip leaves, Southern, bls lb. .75 - —
Celery seed, French, bgs lb. .45 - .47
Indian, bgs lb. .18½- .19
Celluloid scrap (see Pyroxylin scrap).
Cellulose acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E lb. .35 - .46
Butyrate, powd., 17% butyryl content, bgs., works lb. .54 - —
27% butyryl content, bgs., works lb. .64 - —
38% butyryl content, bgs., works lb. .54 - —
50% butyryl content, bgs., works lb. .63 - —
Cerium hydrate, 74% CeO_2, fib. dms., 100-lb lots or more lb. 1.44 - —
77% CeO_2, fib. dms. 100-lb. lots or more lb. 1.74 - —
Oxalate, NF, bbls., bgs., works lb. 1.05 - —
Oxide, optical grade, bgs. 50-lb. lots or more, works lb. 1.85 - 1.98
smaller lots works lb. 2.03 - 2.23
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, cs lb. .70 - .75
Roman, cs lb. 1.00 - 1.15
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
5-ton lots, works lb. .26½- .32¼
smaller lots works lb. .27 - .50
Bone (see Black, bone).
Charcoal, hardwood, briquets, bgs., c.l., works ton 77.00 -88.00
granular, bgs., works ton 77.00 - —
bulk, c.l., works ton 70.40 - —
Pinewood, gran., powd., bgs., c.l., works, South ton 53.50 -63.50
t.c.l., works, South ton 53.50 -63.50
lump bgs., c.l., works, South ton 50.00 - —
t.c.l., works, South ton 53.00 -67.50
bulk, c.l., works, South ton 31.50 - —
Chestnut extract, liquid, 25% tannin, bbls., c.l., works lb. .0510- —
l.c.l., works lb. .0543- —
tanks, works lb. .04¼- —
powd., 60% tannin, bgs., extra, c.l., works lb. .1092- —
l.c.l., works lb. .1165- —
Chloral, tech., 94% min., dms., c.l. works lb. .23 - —
l.c.l., works lb. .24 - —
tanks, works lb. .21 - —
Hydrate, USP, 40-lb. jars, 1,000-lb. lots lb. 1.30 - —
500-lb. lots lb. 1.33 - —
100-lb. lots or less lb. 1.35 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
l.c.l., 5,000 to 10,000 lb. lots, frt. alld lb. .66 - —
clarified, dms., c.l., frt. alld lb. .75 - —
l.c.l., 5,000 to 10,000 lb. lots, frt. alld lb. .76 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
m-Chloroaniline, dms., c.l., frt. equald lb. .75 - —
l.c.l., same basis lb. .80 - —
o-Chloroaniline, dms., c.l., works, frt. equald lb. .70 - —
l.c.l., same basis lb. .72 - —
p-Chloroaniline, dms., c.l., works, frt. equald lb. .75 - —
o-Chlorobenzaldehyde, dms., works. lb. 1.20 - —
p-Chlorobenzaldehyde, dms., works. lb. 1.33 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .15¼- —
l.c.l., same basis lb. .16½- —
70%, dms., c.l., same basis lb. .18 - —
l.c.l., same basis lb. .19 - —
Rubber, 5, 10, 20 cps., ctns., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works lb. .60 - —
l.c.l., works lb. .61 - .62
Chlorine, liquid, cyls., c.l., works, frt. equald lb. .09½- —
l.c.l., Metropolitan area lb. .11 - .12¼
tanks, single units works, frt. equald 100 lbs. 2.53 - —
multiple units, 5 cars, works, frt. equald 100 lbs. 3.80 - 3.83
3 cars, same basis 100 lbs. 3.80 - —
2 cars, same basis 100 lbs. 5.00 - —
1 car, same basis 100 lbs. 6.00 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - .182
l.c.l., same basis lb. .19 - .20
tanks, same basis lb. .17 - .171
USP, dms lb. .30 - .35

CAT-TEX SOLES

Give
More Mileage,
More Comfort
because they're
Compounded with

DAREX 43G

One of the reasons Cat's Paw Rubber Company of Baltimore produces shoe soles that are recognized in the trade as leaders in both comfort and durability, is the use of DAREX 43G in the compounding process.

DAREX 43G High Styrene Copolymer imparts *both* higher hardness and unusually long flex life to shoe soles. Abrasion and tear resistances are also superior. Furthermore, stocks compounded with DAREX 43G show exceptional stability in prolonged storage, giving better mold flow—more flexible production schedules.

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2-Chloro-4-nitroaniline, paste, 100% basis lb. .81 - —
4-Chloro-2-nitroaniline, dms., dlvd. lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald. lb. .34½- —
l.c.l., same basis lb. .35½- —
p-Chlorophenol, dms., c.l., frt. equald. lb. .34½- —
l.c.l., same basis lb. .35½- —
Chlorophyll, oil soluble, 4%, not fixed, pails, tins, works lb. 4.25 - —
copper fixed 6½% tins, pails, works lb 4.25 - —
Sodium-copper, equeous soln., 4%, dms., pails, works lb. 3.75 - —
8%, pails, dms., works lb. 4.90 - 4.80
14%, dms., works lb. 8.90 - —
concentrated, dom., 50%, dms., works, 100% basis lb. 42.00 - —
75%, dms., works, 100% basis lb. 45.00 - —
90%-100%, dms., works, 100% basis lb. 45.00 - —
imported, 60%, tins, 100% basis lb. 58.00 - —
90%, tins, 100% basis lb. 58.00 - —
75%, tins, 100% basis lb. 58.00 - —
Chloropicrin, com'l, bots. lb 1.50 - —
cyls. 180 lbs frt alld lb 95 - —
100 lbs., same basis lb. .97 - —
25 lbs. same basis lb 1.22 - —
Cholesterol, USP, fib. dms., 100-lb. lots lb 6.85 - —
Choline bitartrate fib. dms., frt adjusted lb. 1.50 - 1.75
Chloride fib dms., frt adjusted. lb 1.50 - 1.75
Dihydrogen citrate, fib. dms., frt. adjusted lb. 1.50 - 1.75
Chromium acetate, soln., 7½% bbls., works lb. .08½- —
chys works lb. .10¼ —
Fluoride, bbls., works lb. .51 - .52
Green (see Green, chrome).
Oxide (see Green chromium oxide).
Trioxide NF bots lb 82 .80
Yellow, (see Yellow chrome)
Cinchona bark, NF, red, broken, bgs lb. .35 - .40
yellow, broken, bgs lb. .35 - .40
Cinchonidine cryst. cns. 100-oz. lots. oz. .65 - —
Sulfate cns., 100-oz. lots oz. .37 - .40½
Cinchonine cryst. cns., 100-oz. lots. oz. .52 .57
Sulfate, NF, cns., 100-oz. lots oz. .27½- .30½
Cinchophen NF, heavy density, dms. frt adjusted lb. 3.70 4.05
standard density, dms., same basis lb. 3.50 3.85
Cinchophen-sodium, dms., frt. adjusted lb 4.50 4.85
Cinnamic alcohol (see Alcohol cinnamic).
Cinnamon, Ceylon, No. 2, bls. lb. .44 - —
"0000," bgs., ship't lb. .55 - —
Citral, bots., cns. lb. 3.50 - 4.50
Citronellal, bots., dms. lb. 1.85 - 2.50
Citronellol, bots., ums. lb. 2.00 - 2.55
Civet artificial bots lb 13 75 15.00
natural, bots oz. 7 50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn. ton. 19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton. 10.00 - —
purified, bgs., c.l., Tenn ton. 20.50 - —
imported, airfloated, bgs., c.l., Atlantic port, long ton. 42.00 -45.00
lump, bulk, Atlantic port ton. 27.00 -30.20
China, dom., dry-grd., air-float., 99%, 325 mesh, bgs., c.l., Georgia, works ton. 10.00 - —
l.c.l., Georgia, works. ton. 15.50 - —
300 mesh, bgs., c.l., Georgia, works ton. 13.50 -14.50
l.c.l. ton. 35.00 -36.00
imported, white, lump, bulk, c.l., ex dock, Phila., Portland, Me. gross ton. 20.00 -35.00
powd., bgs., c.l., ex dock net ton 50 00 —
l.c.l., ex whse. net ton. 60.00 -65.00
Clove, Madagascar, bls. lb. .56 - .57
Zanzibar, bls. lb. .67 - .68
CMC, purified, high vis. (see Gum Cellulose), standard, low vis., bgs., 23,000 lbs. or over works frt allowed lb 60 - —
smaller lots, same basis lb. .62 - —
medium vis bgs. 23,000 lbs or over, works, frt. alld. lb. .57 - —
smaller lots same basis lb. 59 - —
tech., high vis., 58% purity, bgs., 20,000 lbs. or more, dlvd. E., basis 100% lb. .56 - —
2,000 to 20,000 lbs., dlvd. E. lb .58 - —
less than 2,000 lbs., dlvd. E lb. .62 - —
low vis., 80% purity, bgs., or fib. dms., 23,000 lbs dlvd E., basis 100% lb. .39 - —
less than 23,000 lbs., dlvd. E., basis 100% lb. .41 - —
62% purity, bgs., or fib. dms., c.l., dlvd. E., basis 100%. lb. .39 - —
l.c.l., dlvd. E., basis 100% lb. .41 - —
58% purity, bgs., c.l., dlvd. E. basis, net weight lb. .34 - —
l.c.l., dlvd. E lb. .36 - —
47½% purity, bgs., c.l., dlvd. E., basis 100% lb. .39 - —
l.c.l., dlvd. E lb. .41 - —
36½% purity, bgs., c.l., dlvd. E. basis, net weight lb. .13½- —
l.c.l., dlvd E lb. .20 - —
CMC prices W. of the Rockies are 1c. per lb. less than dlvd. E. prices.
Coaltar, crude resale dms., c.l., ex-whse. gal. .275 - .30
l.c.l., ex-whse gal. .285 - .32
tanks, ex works gal. .154 .165
refined, resale, dms., c.l., ex-whse. gal. .2850- .3125
l.c.l., ex-whse gal. .2950- .3245
tanks, ex-whse gal. .1650- .1760
Cobalt acetate, 23.7%, bbls., dlvd lb. 1.37 - —
Carbonate, 46% powd., bgs., dlvd. lb. 2.28 - —
Chloride 24.2% Co. kgs. dlvd. lb. 1.27 - —
Hydrate, 60-61% Co. bbls., dlvd lb. 2.90 - —
Linoleate, fused, 8½% Co., dms. lb. .75¼- —
liquid, 6% Co., dms lb. .61 - —
Metal, 97-99% kgs., ex whse lb. 2.60 - —
Naphthenate, liquid, 6% Co., dms., dlvd lb. .48¼- —
Nitrate, 20.1% Co., bbls., dlvd lb. 1.12 - —
Phosphate, powdered, 32.1% Co., kgs., dlvd lb. 1.79 - —
Oxide, black, 72½-73½% Co., kgs. lb. 1.96 - —
70-71% Co., kgs lb. 1.90 - —
Resinate, fused, 3% Co., dms lb. .29¾- —
Sulfate, cryst. 21% Co., dms., dlvd lb. .95 - —
monohydrated, 33% Co., dms dlvd lb. 1.49 - —
Tallate, 6% Co., dms., dlvd lb. .45 - .53½
Cocaine, USP, cns., 100-oz. lots oz. 15.00 —
Hydrochloride, cns., 100-oz. lots oz. 11 75 —
Cochineal USP gray bgs lb 85 90
Cocillana bark, bgs. lb. .65 Nom.
Cocoa butter, bgs. lb. 1.10 Nom.
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Hydrochloride, cns. 100-oz lots oz. 11 75 - —
Phosphate USP cns. 100-oz. lots oz. 10 25 - —
Sulfate, USP, cns. 100-oz. lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb. .22 - .25
blue, bls. lb. .22 - .25
Colchicine, USP, bots., cns. oz. 33.50 -40.00
Colchicum root, bls lb. .45 - .55
seed, bgs lb. .80 - 1.10
Collodion USP dms lb .32½ —
flexible USP dms lb. .34 —
Colocynth, pulp, bls lb. .25 - .30
Colombo root, bls lb. .20 Nom.
Copaiba balsam, cns., dms lb. .90 - 1.20
Copper acetate, bbls., c.l., works. lb. .40 - —
l.c.l., works lb. .41 - —
Carbonate, 55%, bgs., works lb. .263 - .278
Chloride, anhyd., bbls., works lb. .39 - —
crystals, bbls., works lb. .26¼- —
Cyanide, tech., bbls., 1,000-lb. lots or more lb. .619 - —
smaller lots lb. .639 - —
Gluconate, cns., dms lb. 3.00 - 3.24
Hydrate dms., frt. alld. E. Miss. lb. .40¼- .40¾
Metal, electrolytic, dlvd., Valley basis lb. .30 - —
Naphthenate, liquid, 8% Cu., dms., frt. alld lb. .23½- —
Nitrate, tech., cryst., bbls., works. lb. .33¼- —
Oleate, solid, 9% Cu, dms., works lb. .45 - —
Oxide, black, bbls., works lb. .39 - .44
red, com'l, bbls., works lb. .41 - .46
Oxychloride, bls., frt. alld lb 40 50¼
Quinolinolate fib dms lb. 4.25 4.50
Resinate, precip., dms., frt. alld lb. .27¼- —
Copper sulfate, CP, gran., bbls., works lb. .1715- —
cryst., 99%, bgs., c.l., works. 100 lbs. 10.35 -
l.c.l., works 100 lbs. 10.60 -11.35
monohydrated, 35% dms., c.l., works 100 lbs. 17 10 17.85
tribasic, dealers, bgs., c.l., works, frt. alld 100 lbs. 22.50 - —
l.c.l., works 100 lbs. 23.00 -24.50
Undecylenate dms. lb. 2.90 3.00
Copperas (see Ferrous sulfate).
Copra, Atlantic, Gulf ports, c.i.f. ton. 180.00 - —
Pacific ports, c.i.f. lb. 175.00 - —
Coriander seed, Moroccan, bgs lb. .08 - .08½
Roumanian, bgs lb. .07½- .08
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs. min. 100 lbs 7 31 - —
l.c.l. 100 lbs. 7.46 - —
Syrup, 42° dms., c.l. 100 lbs 7.32 - —
l.c.l. 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric Chloride).
Cortisone acetate, NNR, bulk gram. 3.75 - 4.00
Cottonseed meal, 41%, sacked, Memphis ton. 67.50 - —
36%, sacked, same basis ton. 66.00 Nom.
Coumarin cryst. NF, cns. lb 2.94 3.15
powd. cans lb 3.20 3.25
Cramp bark, NF, bls. lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. cbys. lb. 3.05 - 3.26
Coaltar, crude, tanks, works, frt. adjusted gal. .22 - —
solution, 80%, tanks, works. gal. .2068- —
Creosote, coaltar, refined, dms., c.l., works gal. .3850- —
l.c.l. same basis gal. .4510- —
tanks, same basis gal. .2970- —
Wood, beechwood, cbys., dms. lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb. 1.30 - 1.35
pinewood, dms., works gal. .42½- .50½
Cresol, tech. 50% below 204°C., dry above 207°C., wide distillation range, non-ret., dms. c.l. frt equald lb. .133 - —
l.c.l. same basis lb. .136 - —
ret. dms., c.l., same basis lb. .1325- —
l.c.l., same basis lb. .1375- —
tanks, same basis lb. .120 .1229
USP, non-ret., dms., c.l., same basis lb. 1.43 - —
l.c.l., same basis lb. .146 - —
ret. dms., c.l., same basis lb. .140 - —
l.c.l., same basis lb. .145 - —
tanks, same basis lb. .130 - —
o-Cresol, m.p. over 30°C., ret.-dms., c.l., frt. equald lb. .173 - —
l.c.l., same basis lb. .176 - —
tanks, same basis lb. .16 - —
29°C., ret. dms., c.l., frt. equald. lb. .16 - —
l.c.l., same basis lb. .16½- —
tanks, same basis lb. .15 - —
25-29°C., dms., c.l., frt. equald. lb. .153 - —
l.c.l., same basis lb. .156 - —
tanks, same basis lb. .14 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .49 - —
l.c.l., dlvd lb. .51 - —
Methyl ether, cns lb. 1.90 - 2.50
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼- .25

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0.1% Trituration with Mannitol
B_{12} Solids
for Oral Preparations
Calcium Pantothenate (Dextro)
Choline Bitartrate
Choline Chloride
Choline Dihydrogen Citrate
Tricholine Citrate
†Folic Acid U.S.P.
Nicotinamide U.S.P.
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l.c.l., dlvd. 100 lbs. 15.00 - —
Cube root, powd., 5% rotenone, bgs., works lb. .25 - —
Cubeb berries, XX, NF, bgs lb .50 - .51
powd., cs. lb .58 - .59
Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs lb. .15 - —
Moroccan, bgs. lb. .15 - —
Turkish, bgs. lb. .14 - .14½
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08¼- —
Cyanamide fertilizer mixing grades, 20.6% N, gran., bgs., Niagara Falls, Ont., contract ton. 55.00 - —
pulv., 21% N, bgs., works unit-ton. 2.75 - —
Cyclohexane, tech., dms., c.l., works, gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½- .37¾
l.c.l., works, same basis lb. .30 - .38¼
tanks, works, same basis lb. .27 - .36¼
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
l.c.l., works lb. .35 - —
tanks, works lb. .32 - —
Cyclohexylamine, dms., c.l., works, lb. .46½- —
l.c.l., works lb. .47½- —
tanks, works lb. .45 - —
Cyclopropane, CP, 2-lb. cyls., works, cyl. 48.00 - —
6 oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots gal. .36 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

D

2-4-D, bbls., c.l., works, frt. equald. lb. .43½- —
l.c.l., same basis lb. .494 - —
Butyl ester, dms., c.l., works lb. .46½- —
l.c.l., same basis lb. .51½- .56½
Isopropyl ester, dms., c.l., works, lb. .46½- —
l.c.l., works lb. .51½- .56½
Dandelion root, bls lb. .35 - .40
DDD, tech., flake, grd., fib. bgs., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT powder, bgs., c.l., works, frt. equald lb. .27 - —
smaller lots, same basis lb. .29 - —
fib. dms., c.l., same basis lb. .28 - —
smaller lots, same basis lb. .30 - —
1-Decanol, tech., dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37 - —
tanks, dlvd lb. .32½- —
Deertongue leaves, bls lb. .45 - .48
Defluorinated phosphate, 13% P, paper bgs., works ton. 49.50 - —
Rock, 17% P, paper bgs., works, ton. 56.00 - —
14½% P, paper bgs., works, ton. 48.00 - —
Degras, common, bbls. lb. .11 - .12
neutral, less 2% ffa., bbls. lb. .26 - .27
over 2% ffa., bbls. lb. .25 - .26
Derris root, 5% rotenone powd., bbls lb. .26 Nom.
d-Desoxyephedrine hydrochloride bots. lb. 25.00 - —
dl, bots. lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 8.95 - —
l.c.l. 100 lbs 9.10 - —
canary paper bgs, c.l. 100 lbs 8.69 - —
l.c.l. 100 lbs 8.84 - —
dark, paper bgs., c.l. 100 lbs 8.79 - —
l.c.l. 100 lbs 8.94 - —
white, paper bgs., c.l. 100 lbs. 8.53 - —
l.c.l. 100 lbs. 8.68 - —
Corn dextrin in cotton bgs. 25c. per 100 lbs. higher.
Potato bgs. lb. .10¼- .11
Dextrose, USP, dms. lb. .17¾- —
Diacetone (see Alcohol, diacetone).
Diacetyl, flavor grade, bots lb. 4.50 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .30¼- —
l.c.l., works lb. .33¼- —
tanks, works lb. .28¼- —
Di-tert-amyl phenol, dms., c.l., works lb. .30¼- —
l.c.l., works lb. .33¼- —
tanks, works lb. .28¼- —
o-Dianisidine dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works, lb. .89¾- .90
l.c.l., same basis lb. .90¼- .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots, lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .32 - —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works, lb. .68 - .68½
l.c.l., works lb. .69½- .70
tanks, works, dlvd lb. .70 - .71
Tartrate, dms., works, frt. alld lb. .64 - .71
Dibutylamine, dms., c.l., dlvd lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Di-tert-butyl-p-cresol, dms., c.l., works lb. .91 - —
l.c.l., works lb. .95 - —
Dicapryl phthalate, dms., c.l., dlvd., works lb. .31½- .32
l.c.l., same basis lb. .32 - .33
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .66 - —
l.c.l., works lb. .66½- .67
tanks, works lb. .64 - —
2,5-Dichloroaniline dms., works lb. .75 - .83
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
p-Dichlorobenzene, dms., c.l., frt. alld. E lb. .16½- —
l.c.l., same basis lb. .19 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, refined, dms., c.l., dlvd. E lb. .14 - —
l.c.l., dlvd. E lb. .15 - —
tanks, dlvd. E lb. .13 - —
tech., dms., c.l., works lb. .13 - —
l.c.l., works lb. .13½- —
tanks, works lb. .12 - —
Dichloropentanes, dms., c.l., works. lb. .05 - —
l.c.l., works lb. .05¾- —
tanks, works lb. .04¾- —
Dicyclohexylamine, dms., c.l., works. lb. .51 - —
l.c.l., works lb. .51¾- —
tanks, works lb. .49¾- —
Dicyclohexyl phthalate, fib. dms., c.l., frt. alld., works lb. .58¼- .59
l.c.l., same basis lb. .59¼- .60
Dieldrin, dms., frt. alld lb. 1.80 - —
l.c.l., frt. alld lb. 2.40 - —
Diethanolamine, dms., c.l., dlvd. E, lb. .24¾- —
l.c.l., same basis lb. .25¾- —
tanks, same basis lb. .23 - —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd lb. .67½- —
l.c.l., dlvd lb. .68½- —
tanks, dlvd lb. .65½- —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l., same basis lb. .43 - —
tanks, same basis lb. .40 - —
Phthalate, dms., c.l., dlvd lb. .27 - —
l.c.l., dlvd. lb. .28 - —
tanks, dlvd. lb. .25 - —
Sulfate, dms., c.l., works lb. .18¾- —
l.c.l. works lb. .19¼- —
tanks works lb. .17 - —
Diethylamine, dms., c.l., dlvd. E lb. .50½- —
l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb. .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E, lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13¼- —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., c.l., works, lb. .46½- —
l.c.l., works lb. .47 - —
Monobutyl ether, dms., c.l., works lb. .28¾- —
l.c.l., works lb. .29¼- —
tanks, works lb. .27 - —
Acetate, dms., c.l., works lb. .30 - —
l.c.l., works lb. .30½- —
tanks, dlvd. E lb. .25¼- —
Monoethyl ether, dms., c.l., dlvd. lb. .20¾- —
l.c.l., dlvd lb. .21½- —
tanks, dlvd lb. .19½- —
Acetate, dms., c.l., works lb. .26¾- —
l.c.l., works lb. .27¼- —
tanks, dlvd. E lb. .25¼- —
Monomethyl ether, dms., c.l., works lb. .20 - —
l.c.l., works lb. .21 - —
tanks, works lb. .18½- —
Diethylenetriamine dms., c.l., dlvd E, lb. .43 - —
l.c.l., same basis lb. .44 - —
tanks, same basis lb. .41½- —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo. 110.00 - —
1-kilo lot kilo. 120.00 - —
Digitalis leaves, USP, dom., dms., lb. .90 - 1.10
Digitoxin, USP, bots gram. 5.50 - 6.00
Diglycol laurate, dms lb. .35 - .38
Oleate, dms lb. .31 - —
Stearate, dms lb. .26 - .27
Dihexyl sebacate, dms., c.l., works lb. .66 - —
l.c.l., works lb. .66½- .67
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works. lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .17 - —
Sulfate, bulk gram. .17 - —
2,2'-Dihydroxy-5,5'-dichloro-diphenyl-methane, pure, dms. lb. 2.80 - 3.00
tech., dms lb. 1.04 - 1.14
Di-isobutyl ketone, dms., c.l., dlvd. lb. .15½- —
l.c.l., dlvd lb. .16½- —
tanks, same basis lb. .13½- —
Phthalate, dms., c.l., dlvd. E lb. .31 - —
l.c.l., same basis lb. .32 - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., works lb. .10 - —
l.c.l., works lb. .11 - —
tanks, works lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd. lb. .34 - —
l.c.l., same basis lb. .35 - —
tanks, same basis lb. .32 - —
Sebacate, dms., c.l., works, lb. .65½- .66
l.c.l., works lb. .66 - .67
tanks, works, dlvd lb. .64 - .64½
Di-isopropylamine, dms., c.l., dlvd. E, of Rockies lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .48 - —
Dillseed, dewhiskered, bgs lb. .14 - —
natural, bgs. lb. .13 - —
Dimethyl anthranilate, cns lb. 5.25 - 5.75
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —
Dimethyl ethanolamines, anhydrous, dms., c.l., dlvd lb. 1.43 - —
l.c.l., dlvd lb. 1.45 - —
tanks, dlvd lb. 1.40 - —
70%, dms., c.l., dlvd., 100% basis lb. .55 - —
tanks, dlvd lb. .53 - —
Hydroquinone, dms lb. 1.70 - 2.75
Phthalate, dms., c.l., works lb. .29½- —
l.c.l., works lb. .30½- —
tanks, dlvd. lb. .27½- —
Sebacate, dms., c.l., works lb. 1.27 - —
l.c.l., works lb. 1.28 - —
tanks, works lb. 1.25 - —

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RCI Dibutyl Sebacate
RCI Di-iso-octyl Phthalate

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Synthetic Resins Chemical Colors Phenol Glycerine Phthalic Anhydride Maleic Anhydride Sodium Sulfate Sodium Sulfite

Dimethyl sulfate, 55-gal., ret. dms., c.l., works lb. .15 - —
l.c.l. works lb .16 - —
10-gal. ret. dms., l.c.l., works. lb. .16½- —
Dimethylamine, 25-40%, dms., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .39½- —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .29½- —
l.c.l., frt. alld lb. .30½- —
tanks, frt. alld lb. .28½- —
N,N-Dimethylformamide dms., works. lb. .34 - .36
tanks, works lb. .33 - —
2,4-Dinitroaniline, dms., frt. equald lb. .57 - —
m-Dinitrobenzene, 85°C., dms lb. .20 - —
89°C., dms lb. .22 - —
2,4-Dinitrochlorobenzene, dms., c.l., frt. alld. E lb. .15¼- —
l.c.l., frt. alld E lb. .15¾- —
tanks, frt alld., E lb. .15 - —
2,4-Dinitrophenol, bbls. lb. .37 - —
2,4-Dinitrotoluene, oily, dms. lb. .10 - —
refined, dms. lb. .21 - —
Dioctyl adipate, dms., c.l., works. lb. .45½- —
l.c.l., works lb. .46½- —
tanks, works lb. .43½- —
Phthalate, dms., c.l., frt. alld lb. .34 - —
l.c.l., frt. alld lb. .35 - —
tanks, frt. alld lb. .32 - —
Sebacate, dms., c.l., works. lb. .65½- .66
l.c.l., works lb. .66 - .67
tanks, works, dlvd lb. .64 - .64½
Di-o-tolyguanidine, dms., ton lots, dlvd. lb. .57 - —
smaller lots, dlvd lb. .58 - —
1,4-Dioxane, dms., c.l., works lb. .28¾- —
l.c.l. same basis lb. .29¼- —
tanks, same basis lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., c.l., works. lb. .34 - —
l.c.l., works lb. .37 - —
Dipentene dest.-dist., dms., extra, c.l., works gal. .48½- —
l.c.l., works gal. .53½- —
ex-whse. gal. .70 - —
steam-dist., dms., c.l., works, South. gal. .64 - —
dlvd. N. Y. gal. .82 - —
tanks, works, South gal. .50 - —
Diphenyl, bbls., c.l., works lb. .15 - —
l.c.l. works lb. .16 - —
Diphenyl in bags ¼c. lower.
Oxide, perfume grade, cns lb. .54 - .61
Phthalate, dms., c.l., works lb. .51¾- —
l.c.l., works lb. .53¾- —
Diphenylguanidine dms., ton lots lb. .48 - —
smaller lots lb. .49 - .50
Diphenylhydantoin sodium, USP, dms lb. 5.30 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13¼- —
Monomethyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, exdock ton 70.00 -72.00
Divinylbenzene, 20-25%, dms, c.l., works lb. .20 - —
l.c.l. works lb. .21 - —
tanks, works lb. .19 - —
40-50%, dms., c.l., works, 100% basis lb. 1.00 - —
l.c.l., works, 100% basis lb. 1.15 - —
Dodecylbenzene, dms., c.l., frt. equald lb. .14½- —
l.c.l., same basis lb. .15½- —
tanks, same basis lb. .12½- —
Dyes, coaltar, certified colors for food drugs and cosmetics, 5-lb and 1-lb. lots dlvd.:—
Blue, FD & C, No. 1, cns lb. 17.00 -17.60
No. 2, cns lb. 17.00 -17.60
Green, FD & C, No. 1, cns lb. 17.00 -17.50
No. 4, cns lb. 22.20 -22.85
No. 3, cns lb. 35.25 -35.90
Orange, FD & C, No. 1, cns lb. 3.65 - 3.75
No. 4 cns lb 4.65 4.75
Red, FD&C, No. 1, cns lb. 7.55 7.85
No. 2, cns lb. 4.00 4.10
No. 3, cns lb. 22.20 -22.65
No. 4, cns lb. 7.20 7.50
No. 32 cns lb 5.30 5.40
Violet, FD & C, No. 1, cns lb. 17.00 -17.60
Yellow, FD&C, No. 1, cns lb. 40.50 -41.05
No. 3, cns lb. 3.30 3.40
No. 4, cns lb. 3.30 3.40
No. 5 cns lb. 4.00 4.10
No. 6, cns lb 4.00 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb. lots, dlvd.:—
Black, D&C, No. 1, cns lb. 10.95 - —
Brown, D&C, No. 1, cns lb. 16.10 - —
Green, D&C, No. 5, cns lb. 16.10 - —
No. 6, cns lb. 16.10 - —
No. 7 cns lb. 14.80 - —
Orange, D&C, No. 3, cns lb. 10.95 - —
No. 4, cns lb. 20.05 - —
No. 5, cns lb. 5.70 - —
No. 10 cns lb. 20.70 - —
Red, D&C, No. 8, cns lb. 2.85 - —
No. 9, cns. lb. 2.85 - —
No. 10, cns. lb. 2.30 - —
No. 11, cns. lb. 1.85 - —
No. 12, cns. lb 2.65 - —
No. 17 cns. lb. 10.95 - —
No. 18 cns. lb. 24.00 - —
No. 19 cns. lb. 15.45 - —
No 21, cns. lb 3.60 - —
No. 22, cns. lb. 10.95 - —
No 28, cns. lb. 24.65 - —
No. 33 cns. lb. 17.45 - —
Violet, D&C, No. 2, cns lb. 16.10 - —
Yellow, D&C, No. 7, cns lb. 10.95 - —
No. 10, cns lb 13.50 - —
No. 11, cns lb. 13.50 - —
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 1-lb lots, works, 25-50 lb. lots dlvd:—
Blue, Ext., D&C, No. 1, cns lb. 16.10 - —
Green Ext. D&C, No. 1, cns lb. 16.10 - —
Red, Ext., D&C, No. 1, cns lb. 13.50 - —
Yellow Ext. D&C No. 1 cns lb. 10.95 - —
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.
20 Chrysoidine Y lb. .74 - —
27 Fast light orange 2G lb. .90 - —
31 Phloxine 2G lb. .74 - —
36 Yellow 2G lb. .83 - —
40 Orange II extra, conc lb. 1.06 - —
57 Fuchsine 6B lb. 1.08 - —
79 Scarlet 2R lb. .81 - —
151 Orange AD lb. .55 - —
161 Orange RR lb. .66 - —
170 Fast red A lb. .99 - —
179 Rubine XX, conc lb. 1.14 - —
180 Blue F4B lb. .92 - —
185 Brilliant scarlet 3RN, conc lb. .93 - —
202 Chrome blue black, conc lb. .75 - —
203 Chrome black T lb. .78 - —
208 Fast blue SR lb. .91 - —
216 Chrome red B lb. .84 - —
234 Brown Y lb. .98 - —
246 Blue black, extra, conc lb. .95 - —
275 Milling red 3R, conc lb. 2.03 - —
289 Navy blue 3R, conc lb. 1.19 - —
299 Black F conc lb. 1.54 - —
304 Neutral black 2B, conc., 200% lb. 2.01 - —
32b Fast scarlet 4BNC lb. 1.64 - —

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale or prototype), contract, dlvd., No.
333 Bismarck, brown, RX, conc. lb. .95 - —
365 Brilliant yellow, conc lb. 2.57 - —
382 Scarlet B lb. 1.82 - —
401 Diazo black, BHD lb. .69 - —
406 Blue 2B, extra conc lb. 1.07 - —
419 Red FC conc lb. 1.17 - —
420 Brown M lb. .98 - —
448 Red 4BX, conc lb. 1.30 - —
518 Diamine sky blue FF, extra, conc lb. 1.50 - —
561 Brown B lb. 2.03 - —
581 Direct black EH lb. .94 - —
593 Green BY, conc lb. .72 - —
596 Yellow Brown R extra lb. .91 - —
620 Yellow 2G lb. 1.01 - —
639 Fast yellow 2G lb. 1.79 - —
640 Yellow XX lb. 1.61 - —
655 Yellow OX lb. 2.04 - —
657 Green V lb. 2.10 - —
662 Brilliant green G lb. 2.79 - —
667 Brilliant rolling green 6B, conc lb. 3.68 - —
671 Blue, EG lb. 1.70 - —
681 Crystal violet powder lb. 2.15 - —
698 Violet 4BXN lb. 1.74 - —
720 Brilliant blue, BBG lb. 1.88 - —
729 Blue, B, conc lb. 2.79 - —
749 Red BX lb. 4.33 - —
814 Yellow, NN, Conc lb. 3.11 - —
841 Safranine GF extra, conc., lb. 3.17 - —
865 Nigrosine, WSJ lb. .75 - —
922 Blue GXX lb. 1.71 - —
978 Black GXCF conc lb. .32 - —
1034 Alizarine red SC lb. 2.59 - —
1054 Alizarine blue SAPX lb. 2.91 - —
1078 Alizarine green CG, extra. lb. 2.72 - —
1085 Alizarine blue, black, B lb. 2.33 - —

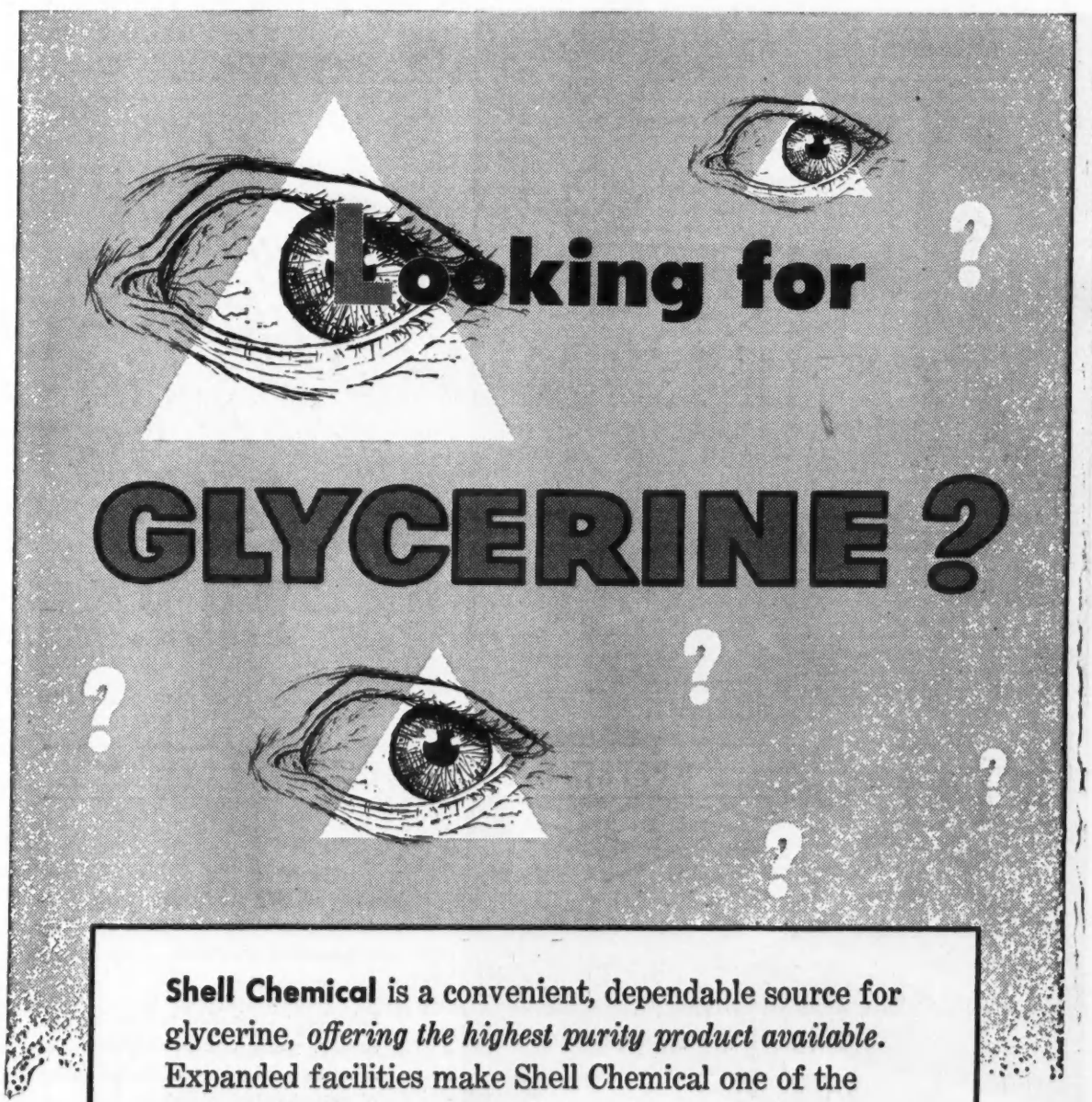
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour index scale or prototype), contract, dlvd., No.
1096 Golden orange, GFD, single paste lb. 1.99 - —
1099 Dark blue BO, single paste. lb. 1.75 - —
1101 Jade green N, double paste. lb. 1.98 - —
1106 Blue RS, double paste lb. 2.96 - —
1113 Blue BLFD double paste lb. 2.25 - —
1150 Olive R, single paste lb. 1.10 - —
1151 Brown R, single paste lb. 1.76 - —
1171 Indigo, synthetic, 20% paste lb. .31 - —
1217 Orange RD single paste lb. 1.65 - —
p-4 Brown, PG lb. 2.30 - —
p-24 Gray L lb 1.60 - —
p-14 Brown, EB lb. 1.51 - —
p-80 Diazo brilliant scarlet 4GL ROAD lb. 2.79 - —
p-202 Diazo black VJ, conc lb. 1.74 - —
p-244 Brilliant scarlet BN lb. 1.31 - —
p-313 Naphthol SWF lb. 2.42 - —
Dyes, coaltar, for stains, oil-soluble, 100-lb dms, sellers' works.
Black blue No 550 lb. .81 - —
Jet No. 551 lb .89 - —
Brown R, conc lb 1.72 - —
Orange R, brilliant lb. .90 - —
Red 4 B, conc lb 1.37 - —
Yellow C lb 1.18 - —
FN, conc lb. 1.22 - —
Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms, sellers' works:—
Auramine O lb 1.85 - —
Black, basic blue lb. 1.21 - —
Jet lb. 1.21 - —

Dimethyl Sulfate—Emetine Hydrochloride

Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works:—
Blue, methylene, 2 B, conc lb. 1.71 - —
Brown, Bismarck, R, conc lb. .86 - —
Chrysoidine, R, extra lb. .63 - —
Y extra lb 64 - —
Fuchsine conc lb 3.00 - —
Green, malachite, conc lb 2.10 - —
Rhodamine, B lb 4.33 - —
Safranine Y conc lb 2.90 - —
Violet, methyl B lb 1.10 - —
Dyes, coaltar for stains, water-soluble, 100 lb dms. sellers' works
Azo rubine R extra conc lb 1.04 - —
Black, acid blue B, extra lb .86 - —
Fast light, 3 G, extra lb 2.04 - —
Methanil conc lb .91 - —
Orange Acid Y, conc lb .47 - —
Scarlet croceine MOO lb 1.45 - —
Yellow azo, conc lb .90 - —
Oil-soluble, spirit-soluble, water-soluble dyes in kegs, 3c. higher; tins, 10c. higher.

E

Echinacea root, bls lb. 1.25 - —
Egg albumin (see Albumin).
Yolk, dried, dom., bbls lb. 1.04 - 1.06
tanners, bbls. lb .06 - .06½
Elder flowers, bright, bls lb. .35 - .40
Elm bark, grinding, bls lb. No prices.
powd., bbls., bxs lb. .60 - —
select, bundles lb. .65 - —
Emetine hydrochloride, USP, bots. oz. 32.95 -35.00



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Ephedrine—Gasoline

Ephedrine, syn., USP, anhydrous, bots., 100-oz. lots oz. .98 - 1.00
hydrous bots. 100-oz lots oz. .92 - —
Hydrochloride, tins, 100-oz. lots oz. .75 - —
Sulfate, cryst., tins, 100-oz. lots oz. .72 - —
powd., tins. 100-oz lots oz. .73 - —
Epichlorohydrin, dms., c.l., works lb. .39 - —
l.c.l., works lb. .40 - —
tanks works lb. .37 - —
Epinephrine, syn., USP, bots., 100-gram lots gram .45 - .55
Ergosterol unirradiated cryst kilo 150.00 —
Ergot, NF, dms., tin-lined lb. 3.25 - 3.50
Eserine salicylate, bots oz. 29.75 -32.50
Sulfate, bots. oz. 34.50 -35.61
Ether (see specific product).
Ethyl acetate, natural fermentation 85-88%, dms., c.l., frt. alld. lb. .13 - —
l.c.l., frt alld lb. .14 - —
tanks frt alld lb. .11 - —
95-96%, dms., c.l., frt. alld. lb. .13¼- —
l.c.l., frt. alld. lb. .14¼- —
tanks frt alld lb. .11¼- —
99%, dms., c.l., frt. alld lb. .13½- —
l.c.l., frt alld. lb. .14½- —
tanks, frt. alld lb. .11½- —
synthetic, 85-98%, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd. lb. .14 - —
tanks, dlvd lb. .11 - —
95-98%, dms., c.l., dlvd lb. .13¼- —
l.c.l., dlvd. lb. .14¼- —
tanks, dlvd lb. .11¼- —
99%, dms, c.l., dlvd lb. .13½- —
l.c.l., dlvd. lb. .14½- —
tanks dlvd lb. .11½- —
Ethyl acetoacetate, dms., c.l., dlvd. lb. .55 - —
l.c.l., dlvd lb. .56½- —
Acrylate, dms., c.l., and truck load, works lb. .44½- —
less than truckload, works lb. .45½- —
tanks, works lb. .42¾- —
Aminobenzoate, USP (see Benzocaine).
Benzoate, cns., dms. lb. .74 - .90
Bromide, tech., 98%, dms., c.l lb. .41 - —
l.c.l. lb. .43 - —
Butyl ketone, dms., c.l., works lb. .35½- —
l.c.l., works lb. .36 - —
tanks, works lb. .34 - —
Butyrate, works lb. .80 - 1.02
Carbamate (see Urethane)
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. .70 - —
smaller lots, works lb. .72 - .80
vis., 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works lb. .69 - .72
smaller lots, works lb. .75 - .81
Chloride, tech., cyl., c.l., works lb. .20 - .22
dms., c.l, same basis lb. .18 - .20
tanks same basis lb. .10 - —
USP, bots., cyls lb. .22 - .24
Cinnamate, cns lb. 2.71 - 3.45
Ethanolamines, mixed, dms., c.l., frt. alld. E. Miss lb. .42½- —
l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40½- —
Ether, absolute, ACS, dms lb. .37 - —
anesthesia, USP, hospitals, 1-lb. cns lb. .89 - —
½-lb. cns lb. .97 - —
¼-lb. cns lb. 1.05 - —
solvent, USP, dms., c.l., dlvd lb. .15¾- —
l.c.l., dlvd lb. .16¾- —
tanks, dlvd lb. .13¾- —
Ethyl ether, synthetic, dms., c.l., dlvd. E lb. .12 - —
l.c.l., dlvd. E lb. .13 - —
tanks, dlvd. E lb. .10 - —
Gallate, dms., 100 to 2,000-lb. lots lb. 3.90 - 4.40
Iodide, cbys., works lb. 3.30 - —
Methacrylate, dms., c.l., and less than truckload, works lb. .51½- .52
Morphine hydrochloride, USP, bots. oz. 15.85 - —
Nitrite (see Ether nitrous).
Oenanthate, dms. lb. 1.00 - 1.50
Oleate, dms., l.c.l., works lb. No prices
Oxalate (see Diethyl oxalate)
Silicate dist. (see Tetraethylorthosilicate).
40% available SiO dms. works, lb. .54½- —
N-Ethyl-a-naphthylamine, dms., works, lb. 1.02 - —
N-Ethyl-o-toluidine, bbls lb. .88 - —
Ethylamine (see Mono. Di- or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .51 - —
l.c.l., frt. alld lb. .52 - —
tanks, frt. alld lb. .50 - —
Ethylbenzene, 99%, dms., c.l. lb. .19½- .20¼
l.c.l. lb. .20½- .21¼
tanks lb. .18½- —
Ethylene dichloride, dms., c.l., dlvd lb. .10¼- —
l.c.l., same basis lb. .12¼- —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies 1c per lb higher.
Glycol, dms., c.l., dlvd. E lb. .13¼- —
l.c.l., same basis lb. .14¼- —
tanks, same basis lb. .11½- —
Monobutyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., dlvd. E lb. .21 - —
tanks, dlvd E lb. .18½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., dlvd. E lb. .21 - —
tanks, dlvd E lb. .18½- —
Acetate, dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd E lb. .19½- —
tanks, dlvd. E lb. .16½- —
Monomethyl ether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., dlvd. E lb. .21 - —
tanks, dlvd. E lb. .18½- —
Acetate, dms., c.l., dlvd. E lb. .28¾- —
l.c.l., dlvd. E lb. .29¼- —
tanks, dlvd. E lb. .27 - —
Monostearate, triple pressed, dms lb. .34 - —
Oxide, dms., c.l., dlvd lb. .19½- —
l.c.l., dlvd. lb. .22½- —
tanks, dlvd. lb. .13½- —
Trichloride (see Trichloroethane).
Ethylenediamine 85-88%, dms., c.l., dlvd. E., 100% basis lb. .46 - —
l.c.l., dlvd. E., 100% basis lb. .47 - —
tanks, dlvd. E., 100% basis lb. .44 - —
Ethylvanillin, cns., 25-lb. lots lb. 6.75 - 7.30
smaller lots lb. 7.35 - 7.40
Eucalyptol, USP, cns., dms lb 1.40 - 1.50
Eugenol, USP, bots lb. 2.55 - 3.15
Euphorbia herb, bls lb. .15 - .17

F

Feldspar, enamel, 100 mesh, bgs., works ton. 20.00 -22.00
Glass, 20 mesh, bulk, tons, works ton. 11.75 -12.50
Pottery bgs. ton lots, works ton. 20.00 -22.00
bulk, c.l., works ton. 18.00 -20.00
Fennel seed, Argentine, bgs lb. .10½- —
Czech, medium, bgs lb. .10½- —
Indian, light, bgs lb. .11½- .12
Fenugreek seed, Moroccan, bgs. lb. .06½- .07
Ferric acetate, liquor, 28°, bbls., c.l., works lb. .09 - —
l.c.l., works lb. .09¾- —
soln., USP IX, cybs lb. .16 - —
djns. lb. .17 - —
Cacodylate, NF, bots lb. 13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 6.75 - —
l.c.l., works 100 lbs. 8.00 - —
indust., cryst., bbls., c.l., works. 100 lbs. 4.75 - 5.25
l.c.l., works 100 lbs. 5.75 - 6.25
42° Be, cbys., c.l., works. 100 lbs. 7.25 - 8.25
tanks, frt. equald., 100% basis 100 lbs. 3.25 - —
USP, cryst., dms., works lb. .07½- .09
Citrate, gran., dms lb. .86 - —
Glycerophosphate, NF, powd lb. 4.75 - 4.85
Hydrophosphite, NF, dms lb. 2.80 - —
Naphthenate liq., 6% Fe., dms., frt. alld lb. .25¾- —
Oxalate, gran., dms lb. .85 - .87
Phosphate, NF, soluble, gran., pearls, cs lb. .64 - .65
Pyrophosphate, NF VII, soluble, gran., pearls, dms lb. .78 - .81
Resinate, 6.75% Fe, dms., frt. alld. lb. .26¼- —
Stearate, dms., c.l., frt. alld lb. .37 - —
Sulfate, partially hydrated, bgs., c.l., works ton. 31.75 -33.75
l.c.l., works ton. 34.75 -40.75
Ferric-ammonium citrate, brown, NF, gran., dms lb. .59 - —
green, USP XII, gran., dms lb. .59 - —
Oxalate, fine gran., dms lb. .25½- .28½
Ferric-potassium, oxalate, fine gran., dms lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28½
Ferrous gluconate, NF, dms lb. .88 - —
Sulfate, gran., bgs., c.l., works. ton. 34.50 - —
l.c.l., dlvd. metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton. 40.00 - —
bulk, c.l., works ton. 27.00 - —
USP, cryst., bbls., dms lb. .09½- .10
Fir balsam, Canada, cns gal. 34.00 -35.00
Oregon, bbls gal. No prices.
Fishliver oil (see Oil fishliver).
Fishmeal, menhaden, ground, domestic, 60% protein, bags, Balto area ton. 145.00 - —
Fishscrap, menhaden, dried, 60% protein, bags, Balto area ton. 140.00 - —
Fluorspar, dom., acid grade, bulk, c.l., mine ton. 60.00 - —
ceramic grade, 93-96% CaF_2, grd., bulk, c.l., mine ton. 57.50 - —
85-92% CaF_2, grad., bulk, c.l., mine ton. 47.00 - —
metallurgical grade, briquets, pellets, 65%, CaF_2, bulk, c.l., mine ton. 34.00 - —
lump, 59-65% effective CaF_2, bulk, c.l., mine ton. 40.00 - —
washed gravel, 59-60% effective, CaF_2, bulk, c.l., mine ton. 40.00 - —
60-65% effective CaF_2, bulk, c.l., mine ton. 40.00 -41.00
65-70% effective CaF_2, bulk, c.l., mine ton. 42.00 - —
70% or better, effective CaF_2, bulk c.l., mine ton. 43.00 - —
Formaldehyde, NF, (inhibited), dms., c.l., works, E lb. .066 - —
l.c.l., works E lb. .071 - —
tanks, works E lb. .0420- —
methanol-free (uninhibited), tanks, works lb. .0395- —

Tankcar and tankwagon prices above are on a delivered basis in New England Eastern New York, N J. Eastern Penna. and part of Delaware. In states other than Eastern Seaboard as well as W of Rockies, prices f.o.b. Texas plants, are .0270 for inhibited and .0245 for uninhibited.

Fleaseed (see Psyllium seed).
Fringetree bark, bls lb. .60 - .81
Fuller's earth, dom., powd., bgs., c.l., Fla., mines ton. 21.25 - —
Georgia mines, c.l. ton. 17.00 -18.00
Illinois mines, c.l. ton. 19.00 - —
Texas mines, c.l. ton. 16.00 - —
spent, f.o.b. shipt. pt., c.l. ton. 4.50 - 5.00
imported, bgs., c.l. ton. 42.00 - —
Furfural, tech., dms., c.l., works lb. .13 - —
l.c.l., works lb. .14 - —
tanks, works lb. .115 - —
Fusel oil, refined, dms., c.l., dlvd lb. .17½- —
l.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .15 - 15½
Fustic extract, cryst., No. 1, bbls., l.c.l. lb. .47½- —
No. 2, bbls., l.c.l. lb. .45½- —
No. 3, bbls, l.c.l. lb. .43½- —
liquid, No 1, bbls., l.c.l. lb. .22½- —
No. 2, bbls., l.c.l. lb. .21½- —
No. 3, bbls., l.c.l. lb. .19 - —
solid, No. 1, bxs., l.c.l. lb. .45 - —

G

G salt, 100% basis, bbls., frt alld lb. .73 - —
Gammapicoline (see g-Picoline).
Gasoline, tanks, refy., ex tax, Arkansas, 84 octane gal. .11¼- —
Group 3, 84 octane gal. .1075- .11375
Gulf coast, 83 octane gal. .10 - .11¼
N. Y. Harbor, 86 octane gal. .1345- .143
Penn. western US motor 86 octane gal. .1375- .1415
natural, group 3, 26-80 octane gal. .04½- —

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Chemical Division, Dept. 656-E
180 Madison Avenue, New York 16

CHEMICAL PROGRESS WEEK-MAY 1954

Celanese® CHEMICALS

*Reg. U. S. Pat. Off.

Gelatin, edible, pure (pork skin), 75 Bloom test, std. bbl., c.l. lb. .57 - —
150 Bloom test, std. bbl., c.l. lb. .68 - —
200 Bloom test, std. bbl., c.l. lb. .74 - —
225 Bloom test, std. bbl., c.l. lb. .77 - —
275 Bloom test, std. bbl., c.l. lb. .84 - —
Gelsemium root, bls lb. .28 - .29
Gentian root, bls lb. .17 - .20
grd., bbls., bxs lb. .22 - .23
powd., bbls., bxs lb. .23 - .24
Geraniol, extra, cns., dms lb. 1.90 - 2.20
standard, cns., dms lb. .60 - 1.00
Geranyl acetate, cns lb. 1.45 - 2.20
Ginger, oleoresin, NF, from African root, bots lb. 4.00 - 7.75
from Jamaican root, bls lb. 6.00 - 10.25
Root, African, bgs lb. .36 - .47
Ginger, Jamaica, No. 1, bgs lb. .40 - .42
No. 2, bgs lb. .32 - .33
No. 3, bgs lb. .30 - .31
Rhation, bxs. lb. Nominal
Nigerian, split, bgs lb. .25 - .25½
Glauber's salt, anhyd. see Sodium sulphate.
Glue, bone, extracted, 60 jellygrams, bgs., c.l., dlvd lb. .16½ Nom.
86 jellygrams, same basis lb. .18 - —
104 jellygrams, same basis lb. .22½ - —
131 jellygrams, same basis lb. .24 - —
164 jellygrams, same basis lb. .24½ - —
191 jellygrams, same basis lb. .25 - —
222 jellygrams, same basis lb. .26 - —
packers' 40 jellygrams, bgs., c.l., dlvd lb. .15½ - —
65 jellygrams, same basis lb. .16½ - —
86 jellygrams, same basis lb. .17 - —
115 jellygrams, same basis lb. .17½ - —
135 jellygrams, same basis lb. .18½ - —
164 jellygrams, same basis lb. .19½ - —
renderers' 100 jellygrams, bgs., c.l., dlvd lb. .15 - —
Bone glue, l.c.l., prices 1c. higher.
hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .21½ - —
95-121, bgs., c.l., dlvd lb. .22½ - —
122-149, bgs., c.l., dlvd lb. .23½ - —
150-177, bgs., c.l., dlvd lb. .24 - —
178-206, bgs., c.l., dlvd lb. .26 - —
207-236, bgs., c.l., dlvd lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30 - —
267-299, bgs., c.l., dlvd lb. .31½ - —
299-330, bgs., c.l., dlvd lb. .35 - —
331-362, bgs., c.l., dlvd lb. .36 - —
363-394, bgs., c.l., dlvd lb. .37 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .39 - —
461-494, bgs., c.l., dlvd lb. .40 - —
495-529, bgs., c.l., dlvd lb. .42 - —
Hide glue l.c.l. prices 1c. higher.
Glycerine, nat., crude, saponification, 88%, to refineries, tanks, dlvd. lb. .22 Nom.
soaplye, 80%, tanks, dlvd lb. .20 Nom.
refined, BP, 98%, dms., c.l., dlvd. lb. .30½ - —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
dynamite, dms., c.l., dlvd lb. .30½ - —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
high gravity, dms., c.l., dlvd. lb. .30½ - —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
USP, CP, 95%, dms., c.l., dlvd. lb. .29½ - —
l.c.l., dlvd lb. .30 - —
tanks, dlvd lb. .29 - —
yellow, distilled, dms., c.l., dlvd lb. .30 - —
l.c.l., dlvd lb. .30½ - —
syn., dms., c.l., dlvd lb. .30½ - —
l.c.l., dlvd lb. .31 - —
tanks, dlvd lb. .30 - —
Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30% dms. c.l works lb. .18¼ - —
l.c.l. works lb. .19 - —
tanks works lb. .18 - —
Gold chloride, acid-brown, bots oz. 22.50 - 23.00
acid-yellow, bots oz. 20.00 - 20.50
Golden seal root, NF, tested, bls. lb. 2.25 - 2.50
powd., bxs lb. 2.75 - 3.25
Graphite, amorph., powd., bgs., fib, dms. ex whse lb. .06 - .09½
crystalline, 80-90%, powd., bgs., fib dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2, 90-95%, bgs., fib dms., ex whse. lb. .29 - .31
Grease, brown, tanks, dlvd lb. .05¾ - —
house, tanks, dlvd lb. .06¾ - —
white, choice, not all hog, tanks, dlvd lb. .09¼ - .09½
yellow, tanks, dlvd lb. .06¾ - —
Green, brilliant, thioflavin, toner, molybdated PMA kgs., works lb 5.10 - —
tungstated PTMA kgs., works lb. 6.00 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .38 - —
16-30%, bbls., same basis. lb. .39 - —
31-45%, bbls., same basis. lb. .40 - —
45-49%, bbls., same basis. lb. .43 - —
50%, bbls. same basis lb. .48 - —
reduced color, 25%, bbls., same basis lb. .19 - —
Chrome green prices are ½c. higher, dlvd., at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher divd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Chromium oxide, hydrated, bbls., dms., c.l., frt. alld lb. 1.00 - 1.10
pure, bgs., c.l., frt. alld lb. .59¼ - —
l.c.l., same basis lb. .39¾ - —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works lb. 4.60 - —
Paris (see Paris green).
Phthalocyanine toner, bbls., works. lb. 3.95 - —
resinated, bbls lb. 3.50 - —
water dispersable, bbls lb. 1.71 - —
Pigment B, kegs lb. 1.35 - —
Grindelia robusta herb, bls lb. .44 - —
Guaiacol, cryst., dms., tins lb. 2.10 - 2.15
liquid, NF, cbys., dms lb. 2.30 - 2.40
Carbonate, NF VII, dms lb. 3.10 - 3.45
Gum, aloe (see Aloe).
Arabic, amber, sorts, bgs lb. .19 - —
powdered, USP, bbls. lb. .23 - .24
Asafetida (see A.)
Asphaltum (see A.)
Benzoin, Sumatra, cs lb. .38 - .42
Camphor (see C.)
Gum, cellulose, bgs., 23,000-lb. lots or more, works, frt. alld. lb. .60 - —
smaller lots, same basis lb. .62 - —
Copal, Congo, No. 1, bgs lb. .20 - .22
No. 2, bgs. lb. .18 - .19
No. 3, bgs. lb. .16 - .17
Manila, C, bgs lb. .38 - .40
CBB, bgs. lb. .26 - .28
DBB, bgs lb. .23½ - .25
DK, bgs lb. .16 - .18
dust, bgs lb. .11 - .12½
soft, MA, bgs lb. .15 - .18
WS, bgs lb. .32 - .36
Philippine, pale, chips, bgs lb. .22 - .24
nubs, bgs lb. .30 - .32
seeds, bgs lb. .15 - .17
sorts, bgs lb. .16 - .17
Pontianak, chips, bgs lb. .20 - .22
nubs, bgs lb. .32 - .34
Dammar, Batavia, A E, cs lb. .27 - .29
dust, bgs lb. .16 - .18
E, bgs lb. .20 - .22
East India, batu, bold, bgs. lb. .14 - .15½
nubs and chips, bgs lb. .08½ - .09
black, bold, bgs lb. .14 - .16
unscraped, bgs lb. .11 - .13
nubs and chips, bgs lb. .11 - .13
pale, chips, bgs lb. .13 - .14
nubs, bgs lb. .18 - .20
Siam, bgs lb. .35 - .37
Singapore, No. 1, bgs lb. .39 - .41
No. 2, bbls lb. .29 - —
No. 3, bbls lb. .25 - —
dust, bgs lb. .16½ - .17
seeds, bgs lb. .20 - .22
Ester, gum-rosin type, dms., c.l., dlvd. fill., Ind., Ky., Mich., Mid Atl States, N.E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .15½ - —
wood-rosin type, dms., c.l., same basis lb. .15 - —
Gum, karaya, NF, powd., No. 1, bbls lb. .38 - —
No. 2, bbls lb. .28 - .29
No. 3, bbls. lb. .24 - .25
Locust bean, powd., bgs lb. .31 - .33
Myrrh, cs. lb. .38 - .40
Opium (see O.)
Olibanum siftings, cs lb. .15 - .30
tears, cs. lb. .22 - .30
Rosin (see R).
Sterculia (see Gum karaya).
Tragacanth, No. 1, ribbons, cs lb. 2.85 - 2.90
No. 2, cs lb. 2.45 - 2.50
No. 3, cs lb. 1.60 - 1.70
powdered, USP, bbls lb. 1.25 - 1.35
Gypsum, plaster of paris, 100-lb. paper bags, trucks, dlvd. N Y C ton 20.30 - —
terra alba, domestic, same basis. ton 19.00 - —
works, N. Y. C. ton 16.00 - —
imported, English, 100-lb. paper bags, ex dock, N. Y. C. ton 55.00 - —
ex warehouse ton 60.00 - 62.00

H

Hawthorn berries, bgs. lb. .28 - .32
Heliotropin, cryst., cns lb. 3.50 - 4.25
Hellebore root dom green, bls lb. .55 - .63
Helonias root, bls lb. 1.75 - 3.00
Hematine extract, cryst., No. 1, bbls., l.c.l. lb. .47 - —
No 2, bbls. l.c.l. lb. .43 - —
No 3, bbls. l.c.l. lb. .41 - —
No 4, bbls., l.c.l. lb. .39 - —
No 5, bbls., l.c.l. lb. .37 - —
paste, No 1 bbls. l.c.l. lb. .20½ - —
Henbane leaves, bls lb. .35 - .40
Heptane, industrial, tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .14¾ - —
Borger, Tex gal. .14¾ - —
Hesperidin methylphalcone, bots., works lb 50.00 - —
Hexachlorophene, dms lb 2.40 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 1,000 lb lots or more, Perth Amboy or N Y C. lb. .239 - —
smaller lots, same basis lb. .242 - —
fib dms. 1,000 lb lots or more, same basis lb .239 - —
smaller lots, same basis lb. .249 - —
Hexamethylenetetramine, USP, dms., 500 lb. lots or more, same basis lb. .40½ - —
smaller lots, same basis lb. .41½ - —
Hexamine (see Hexamethylenetetramine).
Hexane industrial, tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15½ - —
Borger, Tex gal. .15½ - —
1-Hexanol, dms., c.l., works lb. .34½ - —
l.c.l., works lb .35 - —
tanks, works lb .33 - —
Hexyl cinnamic aldehyde dms lb 2.25 - 2.50
Salicylate, dms. lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd. lb. .14½ - —
l.c.l. dlvd, lb. .15½ - —
tanks, dlvd. lb. .12½ - —
Hexyl methacrylate, normal, dms., less than truckload works. lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 - —
smaller lots, dlvd. lb. 14.50 - —

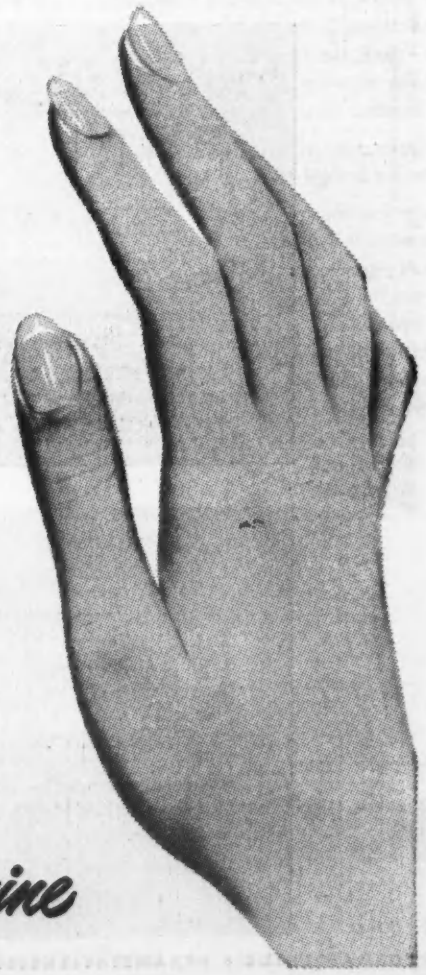
since 1933 / is the Emollient

Daggett and Ramsdell, Inc. has used U.S.P. Glycerine as an ingredient in its "Perfect" Hand Cream since 1933. Glycerine is used in this famous beauty preparation for its emollient and hygroscopic properties. By retaining moisture, Glycerine prevents shrinkage of cream in the jar.

In the manufacture of oil-in-water emulsions —essential to the vanishing type of cream such as hand creams, face creams, and brushless shave creams—Glycerine is a favorite ingredient. It permits a smooth application of the cream and prevents "rolling" on the skin. It preserves the creams and lotions in good condition. Finally, Glycerine acts as a soothing agent to the skin.

Glycerine has many other properties which make it preferable for toilet preparations. It can act as a plasticizer, vehicle, penetrant, solvent, antifreeze and bodying agent. U.S.P. Chemically Pure Glycerine is fully accepted as safe for use in pharmaceuticals.

For the asking, we'll send you a 16-page booklet, "Why Glycerine for Drugs and Cosmetics?" detailing Glycerine's unique range of properties and applications. Write Glycerine Producers' Association, 295 Madison Avenue, New York 17, New York.



Nothing takes the place of Glycerine

Histamine Diphosphate—Lime, Hydrated

Histamine diphosphate, USP, bots. kilo 436.00 - —
l-Histidine hydrochloride, NF, fib. dms., 50-kilo lots, works. kilo 80.00 -85.00
1-5 kilo lots, works kilo 90.00 -95.00
Homatropine hydrobromide, USP bots oz 9.35 -10.60
Methylbromide, USP, bots oz. 9.75 -10.60
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 7.50 - —
Horehound herb, bls. lb. .16 - .19
Hydrastine bots oz 29.50 -31.00
Hydrochloride, NF bots oz 29.50 -31.00
Sulfate, bots oz.35.00 -37.00
Hydrastinine 10 grain bots bot 1.95 —
Hydrastis (see Goldenseal).
Hydrazine, free base, tct. dms., Niagara Falls lb 3.00 3.30
Hydrate 100% ret dms Niagara Falls lb 1.75 1.95
85%, ret. dms., same basis lb. 1.35 - 1.55
Hydroturamide dms fib ctns, works lb .30 .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
l.c.l., works lb. .55 - .60
Fluoride, anhyd., cyls., works lb. .27½- .29
tanks, works lb. .21 - —
Peroxide USP bbls dlvd lb 03¾ .05
35%, cbys., dlvd lb. .228 - —
dms., c.l., dlvd lb. .208 - —
l.c.l., dlvd. lb. .213 - —
tanks, dlvd. lb. .201 - —
Hydroquinone photo grade bbls dms lb 98 1.00
tech. dms., c.l. frt equald lb 77 —
l.c.l. frt equald lb .88 —
Hydroxycitronellal, cns lb. 5.10 - 6.00
Hyoscine salts (see Scopolamine.)
Hyoscyamine, bots oz.15.75 -16.00
Hydrobromide, bots oz.11.00 -12.00
Sulfate, bots oz.10.50 -11.50
Hypernic extract, cryst., No. 2, bbls., l.c.l. lb. .52 - —
liquid No. 1, bbls., l.c.l. lb .35 - —
No. 2, bbls., l.c.l. lb. .27 - —

I

Ichthammol, NF, dms lb. .60 - .75
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb.17.00 -21.00
Inositol, bots., dlvd lb 5.00 - —
dms., dlvd. lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.15 - —
resublimed, USP, bots., jars lb. 2.55 - —
Iodochlorohydroxyquinolin, USP, dms. lb. 5.90 - —
Iodoform, NF, dms., kgs lb 4.90 5.00
a-Ionone, cns lb. 3.95 - 8.25
b-Ionone, cns lb. 4.30 -11.25
Methyl (see under M)
Ipecac root, bgs lb. 6.50 - 6.75
powd., bbls., bxs lb. 7.00 - 7.25
Irish moss bleached prime bls lb. .30 - .35
Iron Compounds (see Ferric or Ferrous).
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .62 - .95
formate, dms. lb .80 —
Propionate, dms lb. 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade, dms., c.l., dlvd E. of Rockies lb. .13¼- —
l.c.l., same basis lb. .14¼- —
tanks, same basis lb. .11¼- —
Isobutyraldehyde, dms., dlvd lb. .50 - —
Isoeugenol, cns lb. 3.45 - 4.25
Isoniazid, bulk, powder, 25-kilo lots or more kilo.23.00 -31.00
smaller lots kilo.24.00 -32.00
Isopentane, commercial grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works lb. .24¼- —
l.c.l. works lb. .24¾- —
tanks, works lb. .22½- —
Isopropanol (see Alcohol, Isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .12 - —
l.c.l., same basis lb. .13 - —
tanks, same basis lb. .10 - —
Alcohol (see Alcohol, Isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. .07 - —
l.c.l., dlvd lb. .08 - —
tanks, dlvd lb. .05 - —
Isopropylamine (see Mono, Di, or Tri-).
Isoquinoline, dms., works lb. .65 - 1.25

J

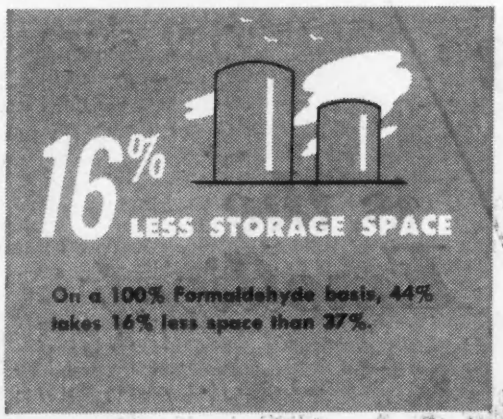
Jalap root, NF, bls lb. .38 - .55
powd., bbls., bxs lb. .49 - .66
Juniper berries, bgs lb. .16 - .18
Tar, NF, dms lb. .42 - .60

K

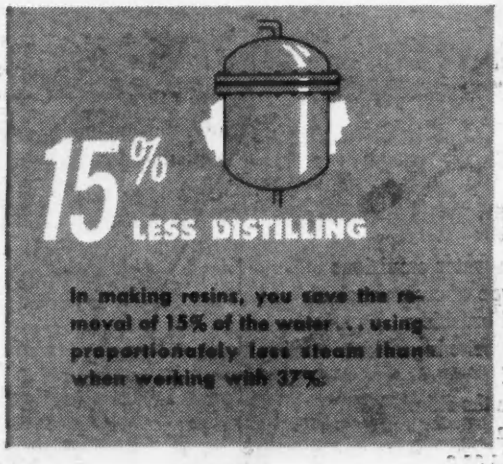
Kaolin (see also Clay, China).
NF, powd., fib. dms lb. .08 - .16½
colloidal fib dms lb. .15 - .15½
Kerosene, tanks, refy., Ark., 42-44 specific gravity, w.w. gal. .095 - —
California, 40-43 s.g., w.w. gal. .138 - .148
Gulf ports, 41-43 s.g., w.w.gal. .09¼- .09¾
N. Y. Harbor, 43-44 s.g., w.w. gal. .105 - —
Okla.-Tex., 41-43 s.g., w.w. gal. .09½- .10
Penn., Western, 45 s.g., w.w. gal. .1145- .1205
Kola nuts, bgs lb. .12 - —

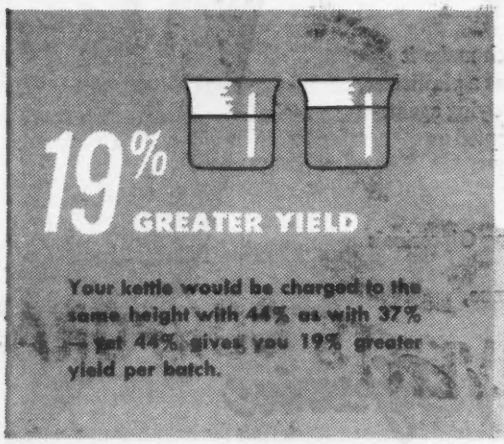
L

Lactose, crude, bgs., c.l., works lb. .15 - —
edible, fib, dms., 30,000-lb. lots, works lb. .22 - —
2,000-lb. lots, works lb. .22¾- —
200-1,800-lb. lots, works lb. .23¼- —
Edible lactose in fib. dms., 1c higher.
USP, fib, dms., 30,000-lb. lots, works lb. .24 - —
2,000-lb. lots, works lb. .24¾- —
200-1,800-lb. lots, works lb. .25¼- —
USP lactose in bgs., 1c. lower.
Lady's slipper root, bls lb. 1.70 - 1.75
Lanolin, cosmetic, dms., works lb. .36 - .38
USP, anhydrous, dms., works lb. .33 - —
hydrous, dms., works lb. .32 - —
Lard, cash, trcs., Chicago lb. .1965- —
Larkspur seed, bgs lb. .20 - .23
Lauryl chloride, distilled, dms., c.l., works, frt. equald lb. .74 - —
l.c.l. lb. .75 - —
Methacrylate, normal, dms., c.l. or truckload lb. .65½- —
Lavender flowers, medium bls lb. .55 .60
ordinary, bls lb. .16 .20
select, bls lb .90 —
Lead acetate, white, crystals, bbls., gran, bbls lb. .22 - —
powd., bbls lb. .23 - —
NF, cryst., gran., powd lb. .31 - .32
Arsenate, acid powder, dealers, 3-lb bgs., or larger, c.l., frt. alld on 96 lbs. or more lb. .27½- —
l.c.l., frt alld lb .28½- —
1-lb bgs., c.l. lb. .41½- —
l.c.l. lb. .42½- —
Blue, basic sulfate, bbls., c.l., ship't point, frt. alld lb. .14¾- —
l.c.l., same basis lb. .15¾- —
Carbonate (see Lead, white).
Chloride dms lb .45 —
Iodide, NF V jars lb. 3.82 - —
Linoleate, fused, 26.5%, dms lb. .32½- —
Metal, pigs, prime, N. Y. lb. .14 - —
St Louis lb. .1380- —
Metallic paste, dms., 20,000-40,000-lb. lots, works lb. .32¾- —
10,000-20,000-lb. lots same basis lb. .33¾- —
2,000-10,000-lb. lots, same basis lb. .34¼- —
200-2,000-lb. lots, same basis. lb. .34¾- —
Prices ex whse, Jersey City, N. J., 4½c. per lb. higher.
Monosilicate, bgs., c.l., works, frt. equald lb. .1495- —
l.c.l., same basis lb. .1545- —
Naphthenate, liquid, 16% Pb, dms., dlvd lb. .17½- —
24% Pb. dms., dlvd lb. .23¾- —
solid, 37% Pb dms., dlvd lb. .31¼- —
Nitrate, bbls lb. .22¼- —
Orthosilicate gel., 50% PbO, dms., works lb. .32¾- —
60% PbO dms. works lb. .41¼ —
Peroxide, powd., tech., bbls lb. .38¾- .40¼
Phthalate, dibasic, dms., works lb. .41 - —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. equald lb. .16¼- —
l.c.l., same basis lb. .17 - —
97% Pb_3O_4, bbls., c.l., same basis lb. .17¼- —
l.c.l., same basis lb. .17¾- —
98% Pb_3O_4, bbls., c.l., same basis lb. .17¼- —
l.c.l., same basis lb. .17¾- —
Resinate, precip., dms., dlvd lb. .28½- —
Salicylate, normal, dms., works lb. .46 - —
Sulfate (see Lead, blue, basic sulfate; Lead, white, basic sulfate).
Tallate, liquid, 16% Pb, dms. lb. .16 - —
24% Pb dms. lb. .21½- —
White, basic carbonate, bgs., c.l., ship't point, frt. alld lb. .16½- —
l.c.l., same basis lb. .17½- —
basic silicate, bgs., c.l. ship't point, frt. alld lb. .15½- .17¾
l.c.l., same basis lb. .16½- .18¾
basic sulfate, bgs., c.l., ship't point, frt. alld lb. .14¾ —
l.c.l. same basis lb. .15¾- —
Lecithin, edible, tech., bleached, non-ret., dms., c.l., works, lb. .15 - .17
l.c.l., same basis lb. .15½- .17½
unbleached, non-ret., dms., c.l., same basis lb. .13 - .15
l.c.l., same basis lb. .14½- .16½
dl-Leucine, dms., works lb.12.75 -15.00
Licorice root, whole, bbls. lb. .08 - .12
gran., bbls. lb. .12 - .17
powd., bbls. lb. .10 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
l.c.l., works lb. .06¾- —
Lime, agricultural, bulk, works ton.14.50 - —
Chemical (quicklime) lump, pebble bulk Adams, Mass. ton.12.50 - —
Annville, Pa ton.11.50 - —
Austin, Texas ton 9.50 - —
Bellefonte, Pa. ton.11.50 - —
Buffalo, N. Y. ton.14.00 - —
Cedar Hollow, Pa. ton.11.50 - —
Duluth, Minn. ton.12.50 - —
El Paso, Texas ton.14.00 - —
Farnams, Mass. ton.14.00 - —
Gibsonburg, Ohio ton 12.50 - —
Hannibal, Mo. ton.10.00 - —
Keystone, Ala ton.10.25 - —
Kimballton, Va. ton.10.25 - —
Knoxville, Tenn ton.10.50 - —
Lee, Mass ton 12.50 - —
Lewisburg, Ohio ton.10.00 - —
Limedale, Ark ton.10.00 - —
Los Angeles, Cal ton 25.10 -26.84
Marble Cliff, Ohio ton 10.00 - —
Martinsburg, W. Va. ton.11.00 - —
Mosher, Mo. ton.10.75 - —
Nelson, Ariz. ton.14.50 -23.65
Quincy, Ill. ton.19.00 -13.00
Reddick, Fla ton 13.50 - —
Scotrock, Ala. ton.10.25 - —
Springfield, Mo ton 12.25 - —
Winooski, Vt. ton 15.50 - —
Woodville, Ohio ton.11.50 - —
York, Pa ton.15.50 - —
Hydrated, paper bags, Adams, Mass ton 15.50 - —
Annville, Pa ton.14.50 - —
Austin, Texas ton.13.00 - —
Bellefonte, Pa ton.14.50 - —
Buffalo, N. Y. ton 16.00 - —
Cedar Hollow, Pa. ton.14.50 - —
Chicago, Ill. ton.15.00 - —
Duluth, Minn ton.14.00 - —
El Paso, Texas ton.17.50 - —
Engle, W. Va ton.14.50 - —
Farnams, Mass. ton.14.00 - —



3 reasons for using Borden's 44% FORMALDEHYDE


15%
LESS DISTILLING
In making resins, you save the removal of 15% of the water . . . using proportionately less steam than when working with 37%.


19%
GREATER YIELD
Your kettle would be charged to the same height with 44% as with 37% — but 44% gives you 19% greater yield per batch.

Now you can get fast frequent deliveries of 44% formaldehyde from two central shipping points: Bainbridge, N.Y. and Demopolis, Ala. If your plant is within approximately 300 miles, deliveries are made by tank trucks or tank cars. Beyond, figure on tank car shipments. Either way, you'll save with Borden 44% formaldehyde.

NOTE: 44% formaldehyde requires elevated-temperature storage at 120°F ± 3°. Borden engineers will be glad to recommend the relatively simple equipment needed for heating storage tanks with steam or electricity. Generally, the savings made in using a 44% solution will quickly pay for any tank-heating costs.

Other types available. If desired, Borden will supply 37% inhibited formaldehyde (also known as "formalin," "U.S.P." or "N.F." formaldehyde) in tank cars, tank trucks or drums from Bainbridge, Demopolis or Springfield, Oregon. 37% uninhibited is shipped in tank cars or tank trucks.

Whichever type you need, order Borden formaldehyde for uniform top quality. It's made to meet your specifications. Write for a quotation to: The Borden Company, Chemical Division, Dept. OP-54, New York 17, N. Y.

INDUSTRIAL CHEMICALS

THE Borden COMPANY
CHEMICAL DIVISION

FORMALDEHYDE * HEXAMETHYLENETETRAMINE * RESORCIN * CASEIN * Urea - Phenolic - Polyvinyl - Epoxy - RESINS

Lime, hydrated, paper bags, Gibsonburg, Ohio ton 16.50 - —
Hannibal, Mo. ton 12.00 - —
Keystone, Ala. ton 13.50 - —
Kimballton, Va. ton 13.50 - —
Knoxville Tenn. ton 13.00 - —
Lee, Mass. ton 15.50 - —
Lewisburg Ohio ton 14 00 - —
Limedale, Ark. ton 12.00 - —
Marble Cliff Ohio ton 13 50 - —
McNeil Tex ton 13 00 - —
Menominee, Mich. ton 14.00 - —
Mosher, Mo ton 13.00 - —
North Tazewell, Va ton 12 75 - —
Quincy, Ill. ton 10.00 -12.00
Reddick, Fla ton 16 00 - —
Scotrock Ala ton 13 50 - —
Springfield Mo ton 12 25 - —
Winooski Vt ton 15 50 - —
Woodville Ohio ton 14 50 - —
York Pa ton 14 50 - —
Spray, paper bgs., Adams, Mass. ton 17.00 - —
Annville Pa ton 17 00 - —
Austin Texas ton 13 00 - —
Bellefonte Pa ton 17 50 - —
Carey Ohio ton 11 00 - —
Duluth, Minn. ton 15.00 - —
Engle, W Va. ton 14 50 - —
Farnams Mass ton 14 00 - —
Gibsonburg Ohio ton 16 50 - —
Keystone Ala ton 13.50 - —
Kimballton Va ton 13.50 - —
Lee, Mass ton 17 00 - —
Lewisburg Ohio ton 16 00 - —
Marble Cliff Ohio ton 16 00 - —
McNeil, Tex. ton 16.00 - —
Menominee Mich ton 14 00 - —
Mosher, mo. ton 13.00 - —
North Tazewell, Va ton 12 75 - —
Reddick, Fla. ton 16.00 - —
Rockland, Me. ton 10 00 - —
Springfield Mo ton 12 25 - —
Scotrock, Ala. ton 13 50 - —
Winooski Vt ton 17 00 - —
Woodville Ohio ton 16.50 - —
York Pa ton 15 50 - —
Lime salts (see Calcium).
Lime-ammonia nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 5.95 - 6.70
ex lignaloe wood oil, dms. lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 5.35 - 6.25
96-98%, dms lb. 6.75 - 7.15
ex petitgrain, bots lb. 3.90 - 5.25
Lindane, 25% formulation, dealers, cns., works lb. 2.20 - —
dms., works lb. 2.10 - —
99%, tech., dealers, dms., dlvd., lb. 3.10 - —
Linden flowers with leaves, bls lb. .34 - .35
without leaves, bls lb. .40 - .41
Linseed meal, expeller 32-34% bulk. Midwest, mills ton. 85.00 Nom.
extracted, 38%, bulk, same basis. ton. 80.00 -81.00
Litharge, com'l powd bbls., c.l., works, frt. equald lb. .15½- —
l.c.l., same basis lb. .16 - —
Lithium benzoate anhd lb 1.65 1.67
Bromide NF bbls., works, frt. equald lb 2.10 2 75
Carbonate, tech., c.l., dlvd lb. 1.00 - —
Chloride cryst. dms lb 1.22 1.28
Citrate, NF, bbls, dms., kgs lb 1.60 1.64
Fluoride, bbls., 10,000-lb. lots lb. 2.15 - —
ton lots lb. 2.20 - —
less ton lots lb. 2.25 - —
Hydride powd. dms., works lb 12.00 -14.00
Hydroxide, monohydrate, ton lots, dms lb. 1.10 - —
Salicylate dms lb. 1.60 1 70
Lithopone, ordinary, bgs., c.l., dlvd. lb. 07½ - —
l.c.l., dlvd. lb. .03¼- .08½
titanated (high-strength), bgs., c.l., dlvd lb. .10 - —
l.c.l., dlvd lb. .11 - —
Lithopone prices, Pacific Coast, 1c. per lb. higher.
Lobelia herb, bls lb. .45 - —
Lobeline sulfate, bots., works oz. 29.50 -33.50
Logwood extract, crystals, No. 1, bbls. l.c.l lb. .41 - —
No. 2, bbls. l.c.l lb .39 - —
liquid, No 1, bbls., l.c.l. lb. .20 - —
No 2, bbls. l.c.l. lb .19 - —
No 3, bbls., l.c.l. lb. 18½- —
solid, No. 1 lb. .35 - —
Lycopodium, cs lb. 1.25 - 1.50
dl-Lysine hydrochloride, bots kilo. 145.00 -140.00

M

Mace, Siauw, No. 1, bls lb. 1.33 - 1.35
West Indian, No. 1, bls lb. 1.30 - —
Magnesia calcined tech., ctns. works lb .32 .34¼
synth., rubber grade, light bgs., works lb. .23 - .25
extra light, works lb. .31 - —
USP, lgnt, ctns lb. .34 - .36
heavy bbls lb. .36 - .38
Magnesite, chemical grade, calcined powd., bgs., c.l., works, frt. equald ton 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewalah, Wash ton. 38.00 - —
Magnesium bromide, jars lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .09½- —
l.c.l., frt alld lb. .10½- —
bb's., c.l., frt. equald lb. .10¾- —
l.c.l., frt alld lb. .11¾- —
kgs c.l., frt. equald lb. .12 - —
USP, bgs., c.l., frt. equald lb. .11¼- —
l.c.l., frt alld lb. .12¼- —
bbls., c.l., frt. equald lb. .11¾- —
l.c.l. frt alld lb. .12¾- —
kgs., c.l., frt. equald lb. .13 - —
l.c.l. frt alld lb. .14 - —
Magnesium carbonate is quoted frt. alld. to N. J. except to Atlantic, Burlington Cape May, Cumberland, Glostershire, Ocean and Salem counties, and to Phila county, Pa. Frt equald with N. Y. C. on all other destinations.
Chloride, anhyd., 95-98%, lump, dms., c.l., works, frt. equald lb. .12¾- —
l.c.l., same basis lb. .14 - .15
powd., bgs., c.l., works ton. 50.00 - —
l.c.l., works ton. 55.00 -105.00
hydrous, flake, bgs., c.l., works, ton. 50.00 - —
l.c.l., bgs ton. 55.00 -105.00
Gluconate, dms., cns lb. 1.30 - 1.37
Glycerophosphate, dms., works lb. 5.40 - 5.50
Hydroxide, NF, medicinals, bbls., dms., kgs lb. 26½- .30
Hypophosphite, dms lb. 1.60 - —
Metal, 99.8% ingots, cs., works lb. .27 - —
sticks, cs., works, frt. alld. on carlots lb. .46 - .48
Oxide (see Magnesia, calcined).
Peroxide, 15%, dms., works lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls lb. .75 - —
Silicate (see Talc).
Silicofluoride, bbls., works lb. .09 - .10
Sulfate, tech., bgs., c.l., works, 100 lbs. 2.15 - —
l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 3.35 - —
l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
smaller lots 100 lbs. 3.35 - —

Trisilicate, USP, dms., 5,000-lb. lots lb. .38 - —
1,000-lb lots lb. .40 - —
100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.
Malathion, dms., works lb. 1.05 - —
Maleic anhydride dms., c.l., dlvd. E lb. .27 - —
l.c.l., dlvd. E lb. .28 - —
Prices on maleic anhydride W. of Rockies 1½c higher.
Mandrake root, bls lb. .32 - .34
Manganese acetate, bbls., dlvd lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate, tech, bbls lb. .24 - —
Carbonate, bbls., works lb. .22 - —
Chloride, anhyd., dms., works lb. .25½- —
Manganese dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, paper bgs., gross for net, works ton. 88.00 - —
paper-lined burlap bgs., works ton. 91 50 - —
dms., works ton. 94.00 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher
Gluconate, dms lb. 1.79 - 1.93
Glycerophosphate, NF, fib dms lb. 4.70 - 4.80
Hydrate, bbls., dlvd lb. .36 - —
Hypophosphite NF dms lb 2.00 - —
Linoleate, liquid 4.35% Mn. dms. lb. .30½- —
solid, precip 8.2% Mn bbls lb. .33½- —
Metal, cs., dlvd. East lb. .30 - .32
Naphthenate, liquid 6% Mn., dms., frt. alld lb. .27 - —
Resinate, fused, 3½% Mn., dms. lb. 21¾- —
precip., dms lb. 24½- —
Sulfate, fertilizer grade, 65%, bgs., c.l., dlvd. S. E ton. 80.50 - —
l.c.l., dlvd. S. E ton. 87.50 - —
Tallate, 6%, dms lb. .24¼- —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton. 69.00 - —
So. American 30% tannin, c.l. ex dock ton. 55.00 -58.00
Mannitol, com'l, dms., works lb. .40 - .43
Melamine, bgs., ton lots, works lb. .53 - —
500 to 2,000 lb. lots, works lb. 33½ - —
smaller lots, works lb. .38½- —
Menadione, USP, bots. gram .06 - .06½
Menthol, natural, USP, Brazilian, cs lb. 5.25 - —
Japanese, cs lb. 11.00 - —
synthetic USP racemic, cns lb 4.95 - —
Menthyl salicylate, tins lb. 4.00 - 4.25
2-Mercaptobenzothiazole, bgs., fib. dms. ton lots works, frt. alld lb. .38 - —
less ton lots, same basis lb. .40 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .43 - —
less ton lots, same basis lb. .50 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.18 - —
gran. or powd., dms., 50-lb. lots or more lb. 4.03 - —
Cyanide, NF VIII, powd., fib. dms lb. 5.79 - —
Iodide, red, NF, fib. dms. lb. 6.97 - —
yellow, NF, fib. dms lb. 7.22 - —
Oxide, red, NF, powd., fib. dms. lb. 4.92 - 4.96
yellow, tech. (see Yellow, mercury oxide).
USP, fib. dms. lb. 5.19 - —

Mercurous chloride (see Calomel).
Mercury, ammoniated (see White precipitate USP).
Metal, 776 lbs. per flask, net flask 250.00 -253.00
Mesityl oxide, dms., c.l., dlvd lb. .1350 —
l.c.l., dlvd. lb. .1450 —
tanks, dlvd. lb. .1150 —
Metaldehyde, dms., works lb. .95 - 1.25
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Choloraniline)
Metanitroaniline (see m-Nitroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, natural, denaturing grade, dms., c.l., frt alld gal. 78 —
l.c.l., frt alld gal. 79 - —
tanks, frt alld gal. 70 - —
Prices on natural methanol W of Miss. 3c. higher
synthetic, Zone 1, dms., c.l., dlvd. lb. .44 - —
l.c.l., dlvd gal. .49 - —
tanks, dlvd gal. .32 - —
Zone 2, dms., c.l., dlvd. gal. .49½- —
l.c.l., dlvd. within established whse. delivery zone gal. .54 - —
tanks, dlvd. gal. .35½- —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries, comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

CSC makes more METHANOL

With the recent opening of the valves of the newly completed $20 million facilities at Sterlington, Louisiana, Commercial Solvents Corporation becomes one of the world's largest producers of methanol, for sale to meet the growing needs of expanding American Industry.

For steady, dependable large-volume supply of methanol, CSC is your logical source.

High-quality CSC methanol, produced from natural gas, is being supplied at a minimum purity of 99.85% in tanker, barge, tank car, tank truck and drums to all parts of the United States from conveniently located bulk and distribution points. For further information contact the Industrial Chemicals Sales Dept., Commercial Solvents Corporation, 260 Madison Ave., New York, N. Y.

INDUSTRIAL CHEMICALS SALES DEPT.
CSC
COMMERCIAL SOLVENTS CORPORATION
ALDEHYDES • ALCOHOLS • ESTERS • AMINES • AMINOALCOHOLS
AMMONIA • NITROPARAFFINS • SOLVENTS • PLASTICIZERS • INTERMEDIATES

Methenamine—Oil, Sassafras

Methenamine see Hexamethylenetetramine)
dl-Methionine, fib, dms., frt, alld., 50-lb. or more lb. 4.55 - —
feed grade, 98% fib., dms., same basis lb 3.00 - —
97% fib dms same basis lb 2.97 - —
Methoxychlor, 50% wettable powder, dealers dms. cs., frt. alld lb. .81 - .86
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .20½- —
l.c.l., same basis lb. .21 - —
hydrogenated, non-ref., dms., c.l., dlvd., zone 1 lb. .21 - —
l.c.l., same basis lb. .21¼- —

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss, Ala., Ga., Fla., S. C. and Tenn.

Acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½- —
syn., dms., c.l., frt. alld. E. gal. .57 - —
l.c.l., frt. alld. E gal. .63 - —
tanks, frt. alld E gal. .45 - —

Synthetic methyl acetone E. territory in all States East of and including Colo., Mont., N. Mex. and Wyo. West territory in all States West of those four.

Acrylate, dms., c.l., and truckload, works lb. .44½- —
less than truckload, works lb. .45½- —
tanks, works lb. .42¾- —
Alcohol (see Methanol).
Amyl acetate, dms., c.l., dlvd. E. lb. .15 - —
l.c.l., dlvd. E lb. .16 - —
tanks, dlvd. E lb. .13 - —
Ketone, dms., works lb. 1.05 - —
Anthranilate, cns. lb. 2.50 - 2.65
Benzoate, cns., dms lb. .53 - .65
Bromide jobbers cyls., various sizes works lb. .47 - .61
Cellulose, special, vis. (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .78 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt. alld. on 100 lbs lb. .89 - 1.00
standard vs. (15,400 cps.), 50-lb. bgs., c.l., alld lb. .66 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt. alld. on 100 lbs lb. .75 - .85
Chloride, indust., cyls., frt. equald. lb. .21 - —
tanks, multi-unit, same basis lb. .15 - —
single unit, same basis lb. .11½- —
refrigerator mfrs., cyls., dlvd lb. .40 - .42
other consumers or service men, cyls., dlvd lb. .57 - —
Cinnamate, cns. lb. 1.43 - 1.80
Cyclohexanol, dms., c.l., works lb. .35½- —
l.c.l., works lb. .36 - —
tanks, works lb. .34 - —
Ethyl ketone, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
Formate, refd., dms lb. .35 - .40
tech. non-ref. dms., any quantity works lb. 00 - —
tanks works lb. 07 - —
Heptin carbonate, bots lb. 33.00 - 42.00
p-Hydroxybenzoate, fib. dms lb. 1.90 - 2.00
Ionone, standard, cns., dms lb. 3.80 - 4.65
Isobutyl carbinol, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
Ketone, dms., c.l., dlvd lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
Lactate dms c.l. works lb .35 - —
Methacrylate, dms., c.l., and truckload, frt. equald., with Belle, W. Va., and Arlington, N. J lb. .36½- —
smaller lots, same basis lb. .37 - —
tanks same basis lb. .35 - —
Naphthyl ketone, cryst., cns lb. 3.60 - 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Roseaniline chloride, NF, fib. dms. lb. 5.44 - —
Salicylate, USP, cns., 50 lb. lots lb. .58 - —
dms. lb. .53 - —
Testosterone, USP, 100-gm. bots. gm. .75 - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .47½- —
l.c.l., works lb. .48 - —
tanks, works lb. .46 - —
Methylene blue, fib. dms., 150-lb. lots, frt. adjusted lb. 3.25 - 3.60
smaller lots same basis lb 3.40 3.60
Chloride, industrial, dms. c.l., dlvd. E lb 13½ —
Methylionone A, cns lb 6.55 8 80
D, cns lb 7.50 9 55
prime cns lb 4 55 6 40
standard, dms., cns lb. 3.80 - 4.65
b-Methylnaphthalene, 32°C m.p., dms., works lb. .90 - —
Methylparaben (see Methyl parahydroxybenzoate).
Methylpentanediol (see Hexyleneglycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04¼- —
roofing, 20 to 80 mesh, works lb. .03 - .04
wet-grd., biotite, bgs., c.l., works, frt. alld., E lb. .06¼- —
l.c.l., ex-whse. or frt. alld., E lb. .07 - —
paint, or lacq., bgs., c.l., works, frt. alld lb. .07¾- —
l.c.l., ex-whse. or frt. alld., E lb. .08½- —
rubber, bgs., c.l., works, frt. alld. E lb. .07½- —
l.c.l., ex-whse. or frt. alld., E lb. .08½- —
wallpaper, bgs., c.l., works, frt. alld., E lb. .07¾- —
l.c.l., ex-whse. or frt. alld., E lb. .08¼- —
white, extra fine, bgs., c.l., works, frt. alld. E lb. .07¾- —
l.c.l., ex-whse. or frt. alld., E lb. .08½- —

Mica, wet-grd. W. of Miss R. ½c. higher, W. of Rockies, 1c. higher.

Milk powder, non-fat, roller, bgs., c.l. lb. .11½- .15½
spray, bgs., c.l. lb. .14 - .16
whole, roller, bgs., c.l. lb. No prices.
spray, bgs., c.l. lb. .29 - .31
Sugar (see Lactose).
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .10½- .11
New York gal. .12 - —
Molybdenum metal, 98% Mo powd., kgs. Mo content lb. 2.00 Nom.
Trioxide, pure, kgs., works, basis Mo content lb. 1.40 - —
technical, agg., works, basis Mo content lb. 1.13 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .11½- —
l.c.l., same basis lb. .12½- —
tanks, same basis lb. .10 - —

Monochlorobenzene prices in the West, 1¾c higher.

Monoethanolamine, dms., c.l., dlvd. E lb. .26¾- —
l.c.l., same basis lb. .27¾- —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms., c.l., dlvd. E. lb. .33 - —
l.c.l., dlvd. E lb. .34 - —
tanks, dlvd. E lb. .31 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylortotoluidin (see N-Ethyl-o-toluidine).
Monoisopropylamine, dms. c.l., dlvd. lb. .30½- —
l.c.l., same basis lb. .31½- —
tanks, same basis lb. .28½- —
Monomethylamine 25%-40% dms., c.l., frt. equald., 100% basis. lb. .37 - —
l.c.l., same basis lb. .37½- —
tanks, same basis lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Morphine cns oz 12.40 12 60
Acetate, anhyd cns oz 9.95 10 00
Hydrobromide cns oz 9.90 9.95
Hydrochloride, NF, cns oz 9.90 9 95
Sulfate, USP, cns oz. 9.90 -10.05
Morpholine dms., c.l., dlvd. E lb. .54¾ —
l.c.l. dlvd E lb. .55¾ —
tanks, dlvd. E lb. .52¾- —
Musk, natural, Tonquin grains, bots. oz. No stocks.
synthetic, ambrette, 100-lb. lots, fib. dms lb. 5.15 - —
25-lb. lots, cns lb. 5.20 - —
5-lb. lots, cns lb. 5.30 - —
ketone, 100-lb. lots, fib. dms. lb. 5.30 - —
25-lb lots cns lb 5.35 - —
5-lb. lots, cns lb. 5.45 - —
xylol, 100-lb. lots, fib. dms lb. 1.40 - —
25-lb lots, cns lb. 1.45 - —
5-lb. lots, cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs. lb. .11 - .11½
Dutch, yellow, bgs lb. .11 - .11½
English, yellow, bgs lb. .12 - .12½
Montana, Oriental, bgs. lb. .12 - —
yellow, bgs lb. .09 - —
Myrobalans, J-1, assorted, bgs., ex dock ton. 47.00 -48.50
crushed, bgs., ex dock ton. 62.00 -63.00
ordinary, bgs., ex dock ton. 43.00 -44.00
extract, indian, solid 53% tannin, ex dock, plus duty lb. .07¼- —

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S).
Naphthalene, crude, dom., 74° tanks, frt. equald lb. .045 - —
78° dms., c.l., same basis lb. .059 - —
l.c.l., same basis lb. .0615- —
tanks, same basis lb. .05 - —
imported, 78°, large lots lb. .04½- .04¾
refined, industrial, dom., chipped or crushed, bgs., frt. equald. lb. .10½- —
flake, bgs., same basis lb. .11¼- —
tanks, same basis lb. .09¾- —
balls, flakes, wholesalers, jobbers,, bbls., c.l., same basis, lb. .13¾- —
cn. 50 l-s, c.l. same basis lb. .14 - —
1-lb pkgs c.l. same basis lb. .16¼- —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, resublimed, dms., works, lb. .75-½- —
tech., bbls., c.l., works lb. .32½- —
l.c.l., works lb. .34½- —
Benzoate, fib. dms., works lb. 3.00 - —
custom contract, works lb. 1.65 - —
Salicylate, dms lb. 5.00 - —
Sulfate, cns lb. 35.00 - —
a-Naphthylamine, bbls., frt. alld lb .50 - —
b-Naphthylamine, tech., obls., works, lb. 1.05 - 1.10
Neocinchophen, USP, dms., frt. adjusted lb 7.00 8.00
Neomycin fib. dms., 100-kilo lots, basis, activity gm. .60 - —
1-kilo lots, basis, activity gm. 1.20 - —
Nerolin, cns lb. 2.45 - 2.65
Niacin (see Acid, nicotinic).
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .75 - .88¼
Carbonate, bbls., dlvd lb. .71 - .78
Chloride, bbls. dlvd lb. .37 - .45
Formate, bbls., ton lots, frt alld. lb. .64 - .65
Metal, electro cathodes, cs., works, lb. .60 - —
Nitrate, bbls. works lb. .36 - .37
Oxide, black, bbls lb. .69 - —
Sulfate, bgs., c.l., dlvd lb. .29 - —
l.c.l., dlvd lb. .29½- .37
Nicotinamide, USP, dms., frt. adjusted kilo. 12.00 -12.30
Hydrochloride, dms., frt. adjusted. kilo. 11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld. lb. 1.03 - —
Niger seed, bgs lb. .14½- .15
Nikethamide, cbys. lb. 7.50 - 8.00
m-Nitroaniline, dms., frt. alld lb. 1.05 - —
o-Nitroaniline, flaked, dms lb. .54 - .57
powd., dms lb. .60 - —
p-Nitroaniline, dms., c.l., frt. alld. lb. .50½- —
l.c.l., frt. alld lb. .53½- —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .12 - —
l.c.l., frt. alld lb. .13 - —
tanks, frt. alld lb. .11 - —
o-Nitrobiphenyl, tech., dms., c.l., works lb. .14½- —
l.c.l., works lb. .15 - —
tanks, works lb. .13 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l lb. .36 - —
l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., same basis lb. .39 - —
l.c.l., same basis lb. .40 - .49
Nitrocellulose, spirit-soluble, 30-35 cps., ¼, ½, sec., bbls., same basis lb. .41 - —
l.c.l., same basis lb. .42 - .44
5-6, 40-60 secs., bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

2-Nitro-4-chlorobenzene, dms lb. .20 - .21
4-Nitro-2-chlorobenzene, dms lb. .26 - .27
2-Nitro-4-chlorophenol, dms lb. .75 - —
Nitroethane, dms, dlvd E of Rockies, lb. .25 - —
Nitrogen solution, tanks, frt. equald, 37-40.8% N, basis 100% ton. 128.00 - —
Nitrogenous process tankage bulk, works unit-ton. 3.65 - 4.40
Sewage sludge, bulk, works unit-ton. 3.75 + .50
Nitromethane, dms., l.c.l., dlvd E. of Rockies lb. .25 - —
a-Nitronaphthalene, bbls, frt. alld. lb. .41 - —
Nitropropane 1, dms., dlvd. E. of Rockies lb. .23¼- —
2, dms., dlvd. E. of Rockies lb. .25 - —
l.c.l., works lb. .24¾- —
tanks, works lb. .22¾- —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., works, frt. equald lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .10 - —
l.c.l., frt. alld lb. .11 - —
tanks, frt. alld lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - .36
m-Nitro-p-toluidine, dms lb. 1.59 - —
Nitrous ether, conc., bots 100-lb. lots lb. 1.28 - 1.35
Nonyl phenol, dms., c.l., works, frt. alld lb. .30 - .30¾
l.c.l., works lb. .30½- .31¾
tanks, works lb. .29 - —
Nutgalls, Aleppo, bgs. lb. .38 - —
Chinese, bgs lb. .45 Nom.
Nutmeg, East Indian, whole, bgs lb. .41 - —
shrivels, bgs. lb. .39 - —
West Indian, bgs lb. .30½- .31
Nux vomica, bls lb. .10 - .12
powdered, bbls., bxs lb. .15 - .17

O

Octane, industrial, tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd. lb. .35 - —
l.c.l., dlvd lb. .37 - —
tanks, dlvd lb. .32½- —
Octyl phenol, dms., c.l., works lb. .23¾- —
l.c.l., works lb. .24¾- —
tanks, works lb. .22¾- —

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies siberica, cns lb. 2.05 - 2.55
Almond, artificial, bitter (see Benzaldehyde)
natural, bitter, F.P.A., bots lb. 3.00 - 3.40
NF, bots. lb. 3.25 - 3.75
sweet, USP, dms., cns lb. .55 - .90
Allspice (see Oil, pimento).
Amyris, dms lb. 1.40 - 1.85
Angelica root, bots lb. 66.00 -100.00
seed, bots lb. 56.00 -95.00
Aniline (see A).
Anise, USP, dms lb. 3.00 - 3.75
Apricot, kernel, USP, dms lb. .45 - .50
Avocado, cns lb. 3.25 - —
Babassu, crude, tanks lb. No stocks.
Bay, NF, Puerto Rican, 50-55%, cns lb. 1.45 - 1.90
55-60%, cns. lb. 1.60 - 2.10
West Indian, 50-55%, cns., dms. lb. 1.45 - 2.25
Bergamot, nat., NF, Italian, cns. lb. 10.75 -13.00
Birchtar, crude, cns lb. 1.75 - 1.90
rectified, NF, cns lb. 2.00 - —
Bois de Rose, Brazil, dms lb. 3.95 - 4.25
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns lb. 2.00 - —
redist., USP, cns lb. 2.55 - 3.00
Calamus, bots lb. 12.00 -20.00
Camphor, sassafrassy, dms lb. .35 - .45
white, dms. lb. .31 - .35
Cananga, native, cns lb. 7.85 -10.25
rectified, cns. lb. 12.50 -13.75
Capsicum (see Capsicum oleoresin)
Caraway, NF, cns lb. 2.80 - 3.45
Cardamom, NF, bots lb. 41.00 -50.00
Cassia, USP (see Oil, cinnamon, USP).
Castor, blown, dms., c.l. lb. .20 - —
l.c.l. lb. .2150- —
dehydrated, bodied, dms., c.l. lb. .2260- —
l.c.l. lb. .2310- —
tanks lb. .2160- —
unbodied, dms., c.l. lb. .2110- —
l.c.l. lb. .2160- —
tanks lb. .2010- —
hydrogenated, bgs., l.c.l. lb. .2350- .2450
No. 3, tech., dms., c.l. lb. .1775- —
l.c.l. lb. .1825- —
tanks lb. .1677- —
No. 1, Brazilian, tanks lb. .1525- .1550
USP, dms., c.l. lb. .1800- —
l.c.l. lb. .1850- —
tanks lb. .1700- —
refined and deodorized, dms., c.l. lb. .1950- —
l.c.l. lb. .20 - —
tanks lb. .1850- —
sulfonated, 50%, dms., l.c.l. lb. .13½- .14
75%, dms., l.c.l. lb. .17 - .17½
Cedarleaf, cns., dms lb. 2.25 - 3.00
Cedarwood, cns., dms lb. .70 - .85
Celery seed, bots lb. 15.00 -21.00
Chamomile, blue, Hungarian, bots. lb. 185.00-280.00
Chaulmoogra, NF, cns., dms lb. .55 - .70
Chinawood (see Oil, tung).
Cinnamon bark, bots lb. 30.50 -34.25
leaf, cns. lb. 1.25 3.25
USP, cns., dms., (Cassia) lb. No stocks.
Citronella, Ceylon, cns., dms lb. .75 - 1.05
Java, true, dms lb. .80 - .90
Java-type, cns. lb. .85 - 1.15
Clove, USP, cns., dms lb. 3.75 - 4.50
Coconut, crude, tanks, N. Y. lb. .14¼- —
Pac. Coast lb. .14 - —
refined Cochin type, tax incl., ret. dms., l.c.l. lb. .22¼- —
deodorized, tax incl., non-ret. dms., c.l. lb. .24½- —
Cod, Newfoundland, dms lb. .09½- .10
Codliver, USP, dms. gal. 1.55 - 1.65
Copaiba, cns lb. 1.80 - 2.50
Coriander, USP, bots lb. 16.20 -20.00
Corn, crude, tanks, works lb. .14½- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .07¾- —
refined, salad, dms lb. .19½- .19¾
tanks lb. .18 - —
Costus, bots. oz. 9.00 - —
Cottonseed, crude, tanks, South-East lb. .14¼ Nom.
Valley lb. .14 - .14½
Texas lb. .13¾- .13¾
foots (soapstock), acid 95%, tanks, N. Y. lb. .04½- —
raw, 80%, tanks, same basis lb. .02½ Nom.
refined, salad, dms lb. .19¾- .19¾
tanks lb. .17¾- —
Oil, creosote (see Creosote, coaltar).
Croton, cns lb. 2.95 - 4.00
Crude (see Petroleum, crude).
Cubeb, cns. lb. 4.50 - 6.00
Cumin, bots., cns lb. 4.15 - 4.30
Cypress, bots. lb. 5.30 - —
Degras (see D).
Dillseed, bots lb. 2.80 - 4.25
Dillweed, dom., bots., dms lb. 4.30 - 5.30
Dip (see D).
Erigeron, cns. lb. 5.50 - 7.50
Eucalyptus, NF, rectified, 70-80%, dms lb. .60 - .95
80-90%, dms lb. .75 - 1.25
Fennel, sweet, USP, cns lb. 2.30 - 3.25
Fir, Canada, cns lb. 2.35 - 2.80
Fish, refined, alkali, dms lb. .1400- .1500
kettle-bodied, dms lb. .1580- .1680
light-pressed, dms lb. .1250- .1350
tanks lb. .1100- —
Fishliver, crude, for feeds or concentrating, 4,000 to 12,000 A units per gm., dms., 1,000,000 units. .08 .09
10,000 to 20,000 A units per gm., dms 1,000,000 units. .09 .10
25,000 to 35,000 A units per gm., dms 1,000,000 units. .09 .10
40,000 to 55,000 A units per gm., dms 1,000,000 units .10½- .11
100,000 A units per gm., dms 1,000,000 units. .12 .14
200,000 A units per gm., dms 1,000,000 units. .12 .14
300,000 A units per gm., dms. 1,000,000 units. .12 - .14½
400,000 A units per gm., dms 1,000,000 units. .12 - .14½
500,000 A units per gm., dms 1,000,000 units. .12 - .14½

Prices above are based on the USP XIV method of conversion, Morton-Stubbs Corrected E x 1900.

Fusel (see F).
Garlic, pure, bots oz. 6.00 - 9.50
Gaultheria (see Oil, wintergreen)
Geranium, Algerian, cns. lb. 10.00 -12.00
Bourbon, cns. lb. 10.75 -13.00
Turkish (see Oil palmarosa)
Ginger, dist., bots lb. 9.85 -13.50
Grapefruit, dms lb. 2.60 - 3.25
Grease, No. 1, dms lb. .13½- .14½
exta, winter, strained, dms lb. .17½- .18
prime, burning, dms lb. .18½- .19
Guaiacwood, cns lb. 1.40 - 1.90
Hemlock, cns. lb. 2.10 - 2.50
Juniper berry, NF, VIII, bots lb. 2.75 - 4.00
twice rectified, bots lb 3.60 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns lb. .65 - —
Lard (see Oil, grease).
Laurel leaf, dms., cns. lb 9.75 -12.50
Lavandin, dms., cns lb. 2.00 - 2.85
Lavender, flower, USP, French. 30-32% ester, cns. lb 2.50 4.50
38-40% ester, cns lb 5.60 - 7.25
40-42% ester, cns lb. 4.75 - 6.90
Spike, Spanish, cns lb 1.50 - 2.00
Lemon, USP, Calif., cns., dms lb. 6.35 - 6.50
Messina, cns. lb. 6.05 - 8.50
terpeneless, bots lb. 32.00 -85.00
Lemongrass, cns., dms lb. 1.50 - 2.00
Lignaloe wood, Mex., cns lb. 3.90 - 4.50
Lime, distilled, Mexican, cns lb. 5.25 - 6.50
West Indian, cns lb. 5.40 - 7.25
expressed, West Indian, cns lb. 7.75 - 8.50
terpeneless, bots lb. 29.50 -100.00
Linseed, raw, dms., c.l., N. Y. lb. .1675- —
l.c.l., lb. .1755- .1800
tankcar, f.o.b. Minneapolis, lb. .1400- .1430
New York lb. .1525- —
tankwagon, New York lb. .1555- —
Boiled linseed oil, .006c. per lb. higher.
Mace, dist., cns., dms lb. 3.00 - 4.25
Manadarin, Florian, dms. lb. 2.75 - 5.35
Italian, cns lb. 6.25 - 8.50
Menhaden, crude, tanks, Atlantic Coast lb. .07¼ Nom.
Gulf ports lb. .07¼ Nom.
Mineral, white (see Oil, white mineral)
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms lb. .18 Nom.
synthetic, cans, dms lb. 1.50 - 1.85
Neatsfoot, 15° cold test, dms lb. .33 - .34
20° cold test, dms. lb. .32 - .33
30° cold test, dms. lb 30 31
Neroli, NF, French, bots lb. 85.00 -260.00
Spanish, bots lb. 35.00 -85.00
Nutmeg, USP, dist., East Indian, cns., dms lb. 2.85 - 3.65
West Indian, cns., dms lb 2.60 - 3.65
Ocotea, cymbarum, dms lb. .90 - 1.30
Oiticica, liq., dms lb. .18½- .19
tanks lb. .17 - .17¼
Oleo, extra, dms lb. .19 - .20¼
Olibanum, bots lb 5.50 7.65
extra fine bots lb 8 00 —
Olive, edible, dms., duty paid lb. 2.20 - 2.25
Orange, sweet, dist., cns lb. .40 .80
expressed, USP, Brazilian, cns., dms lb. No stocks.
Calif., cns., dms lb. .70 - 1.25
Florida, cns., dms lb. .64 - 1.25
Messina, cns lb. 3.85 - 5.85
West Indian, cns., dms lb 2.50 - 3.65
sesquiterpeneless, bots lb. 65.00 -120.00
Origanum, Spanish, cns lb. 1.95 2.85
Palm, clarified, dms lb. .1240- .1250
kernel, tankcars, duty paid lb. .13¼ Nom.
Palmarosa, cns. lb. 7.00 - 9.00
Paraffin, pale, 100-110 vis., at 100° F tanks, East Coast refinery gal 14 —
Patchouli, dms. lb. 8.00 - 9.25
Peach kernel, USP (see Oil apricot kernel)
Peanut, crude, tanks, f.o.b. mills. lb. .17½- —
refined, dms. lb. .22½- .23½
tanks lb. .21½- —
Pennyroyal, USP, imported, cns. lb. 1.60 - 2.40
Peppermint, natural, dms lb. 5.60 - 6.40
redist., USP, dms lb. 5.95 - 7.00
Persic, USP (see Oil, apricot kernel).
Petitgrain, South American, cns., dms lb. 3.00 - 3.50
Pimento, berry, NF, dms lb. 4.00 - 5.60
leaf, cns lb. 2.35 - 2.75
Pine, dest-dist., dms., l.c.l., works. lb. .11¼- —
ex-whse. lb. .13¼- —
steam dist., dms., ex whse., N.Y.C. lb. .151 - —
Pineneedle, Siberian (see Oil, abies siberica).
Rapeseed, tankcars lb. .17 - —
Red (see Acid, oleic).
Rice bran, clarif., dms lb. .17 - —
tanks, dlvd. E lb. .15 Nom.
Rose, natural, Bulgarian, bots oz. 43.50 -62.25
Rosemary, Spanish, USP, cns., dms lb. .65 - .90
tech., cns., dms lb. .50 - .70
Rue, bots lb. 1.65 - 2.30
Safflower dms c.l. Atlantic coast. lb. .18½- —
tanks, same basis lb. .17 - —
Sage, clary bots lb. 20.00 -25.00
Dalmatian, cns lb. 5.85 - 7.25
Spanish, cns lb 90 1.25
Sandalwood, NF, cns lb. 9.75 -11.75
Sardine, crude, tanks, Pac. coast lb No stocks
Sassafras, artificial, dms lb. .85 - 1.19
natural Brazilian (See Oil cocillana cymbarum)
domestic, USP, cns., dms lb. 1.69 - 2.20

Oil, savin, cns .....lb. 2.75 - —
Savory, cns.....lb. 4.25 - —
Sesame, refd., dms .....lb. .36 - .37
Shingle stain, tar distillate, dms., c.l., works .....lb. .33 - —
l.c.l., works .....lb. .35 - —
tanks, works.....lb. .23 - —
Snakeroot, Canada, cns.....lb.29.50 -31.00
Soybean, crude, tanks, Decatur, lb. .14 - —
foots (soapstock), acid, 95%, tanks, N. Y..lb. .08½- —
raw, 50%, tanks, N. Y....lb. .04 - —
refined, alkali, dms.....lb. .18 - .18¼
tanks .....lb. .16½- —
clarified, alkali, dms.....lb. .17½- .17⅞
tanks .....lb. .16 - —
salad, dms.....lb. .18¼- .18½
tanks .....lb. .16¾- —
Spearmint, USP, dms.....lb. 5.40 - 6.30
Sperm, bleached winter, 45°, dms, lb. .15¾- .16¼
tankcars .....lb. .14 - —
natural winter, 45°, dms.....lb. .1475- .1550
tankcars .....lb. .1300- —
Spruce, cns., dms .....lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns, lb. 4.25 - 9.50
Southern, cns .....lb. 2.50 - 3.00
Tall, crude, tanks, works .....ton.40.00 - —
refined, dms., c.l., works....lb. .06½- —
l.c.l., works .....lb. .06½- .07
tanks, works .....lb. .05 - .05⅛
Tallow, acidless, dms.....lb. .11¾- .12¼
Tansy, dms. .....lb. 7.75 - 9.00
Tar, pine, com'l, dms., extra, c.l., works gal. .42½- —
l.c.l., works .....gal. .50½- —
whse .....lb. .0678- —
tanks, works .....gal. .33½- —
rectified, NF, dms, incl., l.c.l., works, South gal. .90 - —
whse., N. Y. C. gal. 1.00 - —
Tar acid (see "
Theobroma (see Cocoa butter).
Thyme, NF, red, cns., dms lb. 1.70 - 3.75
white, cns. .....lb 1.95 - 4.00
tech. white, cns .....lb. .40 - 1.85
Tung, dms., c.l., N. Y.....lb. .23¾- —
l.c.l., same basis.....lb. .24¼- .24¾
tanks, N. Y. .....lb. .22¾- —
domestic mills .....lb. .23½ Nom.
Turkey red (see Oil, castor, sulphonated).
Turpentine, NF, cns., dms .. lb .20 - 45
Vetiver, Bourbon, cns.....lb.14.00 -17.50
Haitian, cns .....lb.11.80 -21.00
Java, cns. .....lb.22.50 -40.00
Wheat germ, 5-gal dms .....gal.10.00 -13.00
White mineral, tech., 50-65 vis., non-ret. dms., c.l., f.o.b., N. Y. gal. .51½- .54½
65-75 vis., non-ret., dms., c.l., same basis gal. .52½- .55
l.c.l., same basis gal. .57½- .58½
80-90 vis., non-ret., dms., c.l., same basis gal. .53½- .56½
l.c.l., same basis gal. .58½- .59½
125-135 vis., non-ret., dms., c.l., same basis gal. .59½- .62½
l.c.l., same basis gal. .64½- .65½
145-155 vis., non-ret., dms., c.l., same basis gal. .66 - .68½
l.c.l., same basis gal. .71 - .71½
175-185 vis., non-ret., dms., c.l., same basis gal. .69½- .73
l.c.l., same basis gal. .74½- .75
USP, 200-210 vis., non-ret. dms., c.l., same basis gal. .73½- .75
l.c.l., same basis gal. .77½- .78
345-355 vis., non-ret., dms., c.l., same basis gal. .77 - .80
l.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns. lb. 6.35 -10.30
Southern, cns lb. 3.20 -19.50
synthetic (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed, cns. .....lb. 6.75 - 8.00
Wormwood, cns. .....lb. 5.50 - 6.85
Ylang-ylang, Bourbon, bots....lb.17.00 -30.00
extra, bots .....lb.28.00 -40.00
Madagascar bots ..... lb No stocks
Oleostearine, bbls. .....lb. .14¾- —
Opium, USP, cns.....lb.19.20 -19.45
gran., USP cns.....lb.21.65 -21.90
powd. USP cns .....lb.21.65 -21.90
Orange, cadmium lithopone, bbls., frt. alld. E. of Rockies lb. 1.56 - —
Chrome, CP., bbls., dlvd. N of Tenn. and N. C., E. of Miss., R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .31 - —
Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport), 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., 1½c. El Paso, Tex., 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.
Dinitroanilin toner .....lb. 1.30 - —
Mineral, American, bbls, l.c.l., works..lb. .1935- .1960
Molybdated, bbls. .....lb. .44 - —
Orthonitroanilin toner, kgs. ....lb. 1.15 - —
Orange peel, bitter, Haitian, bls..lb. .14 - .16
sweet, bls.....lb. .16 - .18
Orris root, Florentine, bls. ....lb. .35 - .40
Verona, bls.....lb. .29 - .31
powdered, bbls., bxs.....lb. .35 - .40
Orthoaminobiphenyl (see o-Aminobiphenyl).
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see 2-Nitro-4-chlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine).
Orthophenetidin (see o-Phenetidine).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage orange, crystals, No 1, bbls., l.c.l lb. .49 - —
extract, liquid, No. 1, bbls., l.c.l lb. .19 - —
Ouabain, USP, bots .....gram 3.00 - 4.00
Ox bile, extract, powdered, USP 5-lb. lots or more, ctns..lb. 6.00 - —
not extract, powdered 5-lb. lots or more, ctns lb. 4.35 - —
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
smaller lots, works.....lb. 4.92 5.17

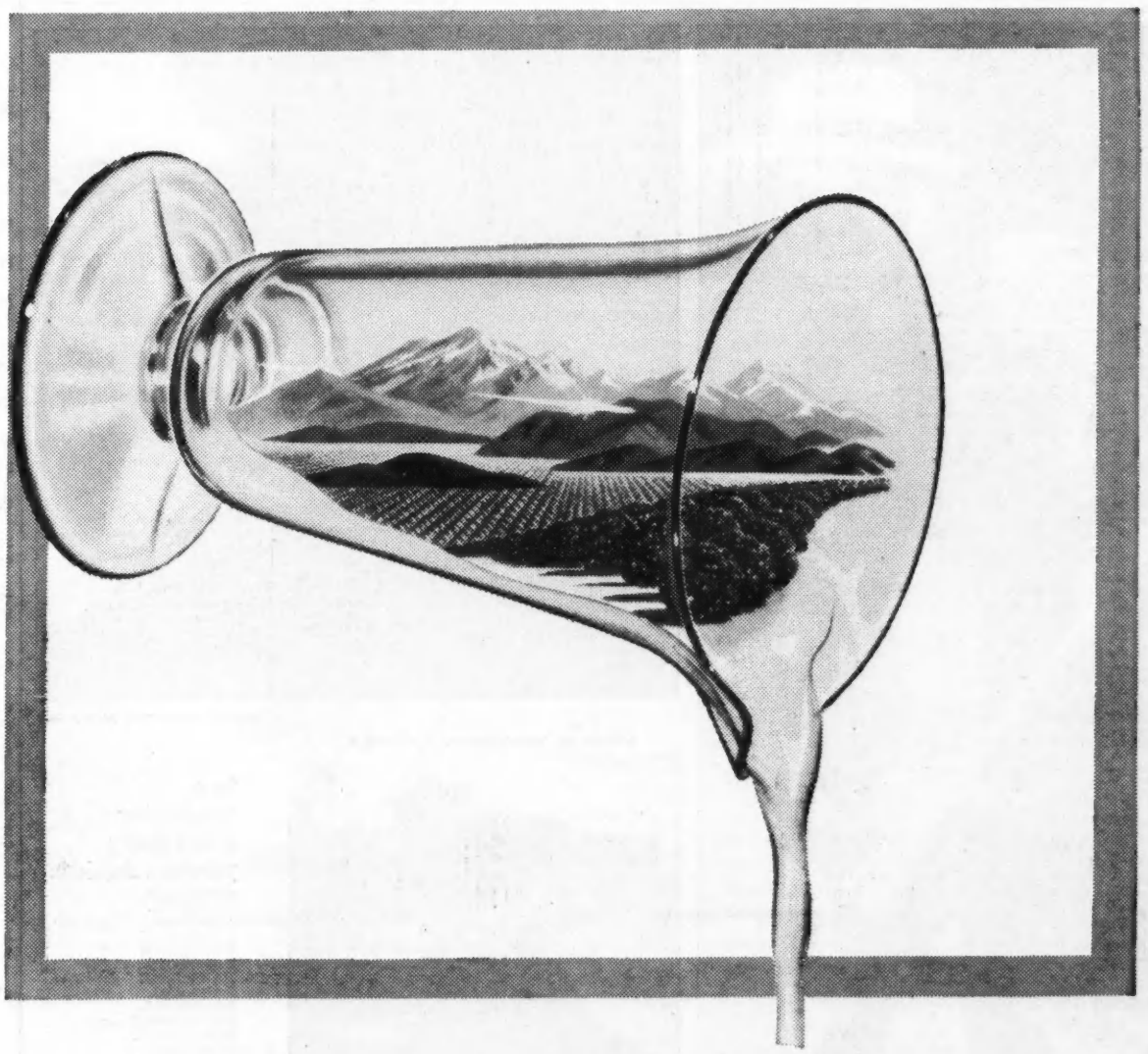
P

Pancreas substance, assay 1:75 bots., 5-lb. lots or more lb. 5.75 - —
Pancreatin USP bots ..... lb 2.50 3.00
Papain, USP, African, bots.....lb. 4.00 - 4.50
Ceylon .....lb. 3.00 - 3.50
Papaverine, natural or synthetic hydrochloride, USP, cns., 25 oz. to 100 oz., lots oz. 5.00 - —
smaller lots ..... oz 5.55 5.20
Sulfate, cns .....oz. 7.10 - 7.35
Paprika, Roumanian, bgs.....lb. .30 - .33
Spanish, bgs. .....lb. .37 - .39
Yugoslavian, bgs. .....lb. .38 - —

Para-anisidin (see p-Anisidine).
Para-acetylaminobenzaldehyde thiosemicarbazone (see p-Acetylaminobenzaldehyde thiosemicarbazone).
Para-aminophenol (see p-Aminophenol).
Parachloroanilin (see p-Chloroaniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachloro-orthonitroanilin (see 4-Chloro-2-nitroaniline).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude scale, white, 121°-123°F, ASTM, solid, c.l., ref'y lb. .0660- —
fully refined, 122°-124°F, ASTM, slabs loose, c.l., ref'y lb. .0845- —
125°-127°F, ASTM, slabs loose, c.l., ref'y. lb. .0845- —
130°-132°F., ASTM, slabs loose, c.l., ref'y. lb. .0855- —
132°-134°, ASTM, slabs, loose, c.l., ref'y. lb. .0855- —
135°-137°F., ASTM, slabs loose, c.l., ref'y. lb. .0855- —
Prices for paraffin in bags and ctns., c.l. 7/10c per lb. higher; 1,000 to 9,999 lbs., 2.7c per lb. higher and under 1,000 lbs., 3.7c. per lb. higher.
AMP temperatures are an arbitrary 3° F. higher than ASTM.
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .12 - —
l.c.l., frt. alld .....lb. .13½- —
powd., bgs., c.l., frt. alld..lb. .15½- —
l.c.l., frt. alld .....lb. .17 - —
USP X, fib dms., c.l .....lb. .198 - —
10,000-lb lots .....lb. .198 - —
1,000-lb. lots .....lb. .198 - —
smaller lots.....lb. .208 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l., works..lb. .13½- —
l.c.l., works.....lb. .14½- —
tanks, works.....lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see 4-Nitro-2-chlorobenzene).
Paranitrophenol (see p-Nitrophenol).
Paranitrotoluene (see p-Nitrotoluene).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15% dealers, dms., works..lb. .48 - .49
tech., dms., works.....lb. 1.62 - 1.64
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paratoluidine (see p-Toluidine).
Paris green, dealer, distributor, dms., c.l., works, frt. alld. on 96 lbs. or over lb. .36 - .40
l.c.l., same basis .....lb. .37 - .53
Passion flower herb, bls.....lb. .21 - .23
Peanut meal, 45%, old process, bgs., mills..ton.92.00 - —
solvent process, bgs., same basis..ton.88.00 - —
Pectin, citrous, NF, powd. bbls lb 2.05 2.06
tech. powd. bbls lb 1.50 - —
imported, Danish, ex whse....lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units..lb. .08½- .09
Procaine, bulk, 1,000,000 units..lb. .08½- .09
Sodium, sterile, bulk, 1,000,000 units. .08½- .09

Oil, Savin—Petrolatum, Extra, Amber

Pentachlorophenol, dms., c.l., works, frt. equald lb. .21 - —
l.c.l., same basis .....lb. .24 - —
truckload, 20,000 lbs. min. same basis lb. .21½- —
Pentaerythritol, tech., bgs., c.l., works lb. .34 - —
l.c.l., works .....lb. .35 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, industrial, tanks, Tex. ref'y gal. .14½- —
Pepper, black, Malabar, spot, bgs lb. .70 - .71
red, Gondar, spot bgs.....lb. .24 - .25
Japanese, hontaka, bgs.....lb. .37 - .38
birdseyes, bgs., new crop..lb. .56 - —
Mombasa, bgs., ship't.....lb. .60 - —
Nigerian, bgs .....lb. .29 - —
Turkish, bgs. .....lb. .24 - .25
Zanzibar, bgs. .....lb. .55 Nom.
white, bgs. .....lb. .80 - .81
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imported, bls. .....lb. 1.25 - —
Pepsin, NF, 1:3,000 bulk.....lb. 3.75 - 3.90
Perchloroethylene dms c.l. or truckloads, frt. alld. lb. .11¼- —
dlvd., E. .....lb. .11½- —
l.c.l., dlvd. ex whse.....lb. .13½- —
dlvd. E .....lb. .13½- —
Peru balsam, dms.....lb. 1.40 - 1.75
Petrolatum, amber, dms., c.l., refy. lb. .03 - .03½
l.c.l., dlvd .....lb. .03¾- .07
tanks, refy .....lb. .03¼- .04¼
cream, dms., c.l., ref'y.....lb. .06½- .07¼
l.c.l., dlvd .....lb. .06½- .06¾
tanks, refy .....lb. .04⅜- .05⅝
extra, amber, dms., c.l., refy lb. .05¼- .05⅞
l.c.l., dlvd .....lb. .07 - .07¼
tanks, refy .....lb. .03½- .04⅜



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There's a reason for the growing popularity of Exchange Oil of Orange. Only Exchange Brand combines the flavor and aroma of California oranges with *Exchange* quality. Carefully selected oranges from the famous California groves of Sunkist Growers are processed to scientific specifications in modern California plants. You receive distinctive flavor and fragrance... in addition to unmatched uniformity of strength.

Sunkist Growers
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Produced by
The Exchange Orange Products Co.
Ontario, California
Distributed in the U. S. exclusively by
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180 Varick St., New York 14, N. Y.
FRITZSCHE BROTHERS, INC.
76 Ninth Ave., New York 11, N. Y.

Exchange
OIL OF ORANGE U. S. P.

Petrolatum, USP—Piperidine

Petrolatum, USP, white, lily, dms., c.l., ref'y.	lb.	.06¾-	.07½
l.c.l., dlvd	lb.	.08¾-	.09½
tanks, refy	lb.	.04¾	.06
snow, dms., c.l., ref'y	lb.	.07½-	.07¾
l.c.l., dlvd	lb.	.09⅜-	.09⅝
tanks, refy	lb.	.05⅝-	.05⅞
soft, dms., c.l., refy	lb.	.08¾-	.07¾
l.c.l., dlvd	lb.	.08½-	.08¾
tanks, refy	lb.	.05 -	.05⅛
yellow, soft, dms., c.l., refy	lb.	.05¼-	.05⅞
l.c.l., dlvd	lb.	.06⅞-	.07⅛
tanks, refy	lb.	.03½-	.05⅞
Petroleum, crude, bulk, at wells, California	bbl	1.42 -	3.35
Illinois	bbl	2.69 -	3.02
Kentucky	bbl	2.62 -	3.02
Louisiana-Arkansas	bbl	2.33 -	3.23
Montana	bbl	1.53 -	2.90
Oklahoma-Kansas	bbl	2.48 -	2.90
Penna. grade, middle district	bbl	3.70 -	—
Texas, East	bbl	2.90 -	—
Gulf Coast	bbl	2.63 -	3.23
North, North-Central	bbl	2.48 -	2.90
Panhandle	bbl	2.48 -	2.90
West	bbl	2.35 -	2.90
Wyoming	bbl	1.53 -	2.90
Fuel oil, bunker C, No. 6, East Coast, Baltimore, Md	bbl	2.25 -	—
Boston, Mass.	bbl	2.29 -	—
Charleston, S. C.	bbl	2.20 -	—
Jacksonville, Fla	bbl	2.18 -	—
New York Harbor	bbl	2.25 -	—
Norfolk, Va.	bbl	2.23 -	—
Philadelphia, Pa	bbl	2.20 -	2.22
Portland, Me.	bbl	2.29 -	—
Providence, R. I.	bbl	2.26 -	—
Savannah, Ga.	bbl	2.20 -	—
West Coast	bbl	1.80 -	2.10

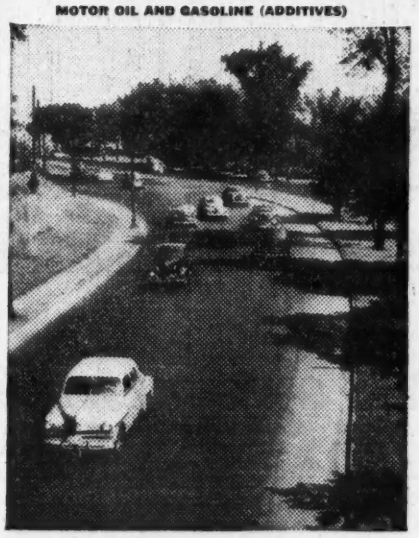
Petroleum, fuel oil, diesel, tanks, ref'y., California	gal.	.1025-	.133
New York	gal.	.104 -	—
Penna., western	gal.	.1075-	.11
furnace, tanks, refy., Arkansas, No. 2	gal.	.08625-	—
No. 3	gal.	.0825-	—
N. Y. Harbor, No. 2	gal.	.095 -	—
Group 3, No. 1	gal.	.08875-	.09375
No. 2	gal.	.0825-	.09375
No. 3	gal.	.07875-	.08125
range	gal.	.08875-	.09375
Pennsylvania western, No. 1	gal.	.109 -	.1185
No. 2	gal.	.106 -	.111
No. 3	gal.	.106 -	.1105
Lacquer diluent, 150°-240°F., b.r., tanks, West Coast, ex tax, Los Angeles	gal.	.168 -	.183
East coast, N. J., N. Y.	gal.	.19 -	—
Group 3, benzol-type	gal.	.14125-	—
toluol-type	gal.	.13125-	—
Mineral spirits, regular tanks, California, ex tax, San Francisco	gal.	.163 -	—
East coast, N. J., N. Y.	gal.	.17 -	—
Group 3	gal.	.11875-	—
tankwagon, Boston	gal.	.19 -	—
Buffalo	gal.	.195 -	—
Chicago	gal.	.279 -	—
Cleveland	gal.	.22 -	—
Newark	gal.	.18 -	—
New York	gal.	.18 -	—
Philadelphia	gal.	.185 -	—
Pittsburgh	gal.	.18 -	—
Providence	gal.	.195 -	—
specially refd., tanks, refy., Watson, Calif.	gal.	.244 -	—
Borger, Tex.	gal.	.24 -	—
Houston, Tex.	gal.	.24 -	—
Wood River, Ill.	gal.	.2625-	—

Petroleum, mineral spirits, specially refd., tank transport, dlvd. N. J.	gal.	.32 -	—
dlvd. N. Y.	gal.	.33¼-	—
tankwagon, N. J., dlvd.	gal.	.36 -	—
N. Y., dlvd.	gal.	.37 -	—
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y.	gal.	.17 -	—
Group 3	gal.	.12875-	—
tankwagon, Newark	gal.	.18 -	—
New York	gal.	.18 -	—
Philadelphia	gal.	.185 -	—
High solvency (see Petroleum solvent, partial aromatic).			
V.M.&P., 225°-300°F., b.r., tanks, West Coast, Los Angeles	gal.	.168 -	—
Portland, Ore.	gal.	.174 -	—
San Francisco	gal.	.173 -	—
Seattle, Wash.	gal.	.174 -	—
East Coast, N. J., N. Y.	gal.	.18 -	—
Group 3	gal.	.12875-	—
tankwagon, Boston	gal.	.205 -	—
Chicago	gal.	.289 -	—
Cleveland	gal.	.23 -	—
Newark	gal.	.195 -	—
New York	gal.	.195 -	—
Philadelphia	gal.	.20 -	—
Pittsburgh	gal.	.19 -	—
Solvent, partial aromatic, tanks, East Coast, N. J., N. Y., 205° 292°F. b.r., 37° 38°C. m.a.p.	gal.	.24 -	.26
17°-29°C, m.a.p.	gal.	.29 -	.30
256°-383°F., b.r., 35°C., m.a.p.,	gal.	.29 -	—
27°-28°C. m.a.p.	gal.	.29 -	.29½
19°C. m.a.p.	gal.	.34 -	—
310°-392°F. b.r., 30°-38°C. m.a.p.	gal.	.27 -	.30
17°-19°C., m.a.p.	gal.	.35 -	.38

Petroleum, solvent, partial aromatic, tanks, East Coast, N. J., N. Y., 350°-420°F. b.r., 32°-39°C. m.a.p.	gal.	.30 -	.30½
25°C., m.a.p.	gal.	.39 -	.39½
18°-21°C., m.a.p.	gal.	.35 -	.42½
rubber, tanks, Cal., ex tax, San Francisco	gal.	.173 -	—
East Coast, N. J., N. Y.,	gal.	.18 -	—
Group 3	gal.	.12875-	—
Stoddard, tanks, East Coast, N. J., N. Y.	gal.	.17 -	—
Group 3	gal.	.12375-	—
Pennsylvania, western	gal.	.15 -	—
tankwagon, Boston	gal.	.19 -	—
Chicago	gal.	.289 -	—
Cleveland	gal.	.22 -	—
Los Angeles, ex tax	gal.	.173 -	—
Newark	gal.	.18 -	—
New York	gal.	.18 -	—
Philadelphia	gal.	.185 -	—
Pittsburgh	gal.	.18 -	—
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works	lb.	.16 -	.18¼
l.c.l. works	lb.	.17 -	.18½
tanks, works	lb.	.14 -	.16½
50-55% sulfonic content, non-ret. dms., works	lb.	.15½-	—
l.c.l., works	lb.	.16½-	—
tanks, works	lb.	.12½-	—
o-Phenetidine, dms., works	lb.	1.00 -	—
p-Phenetidine, dms., works	lb.	1.00 -	—
Phenobarbital, USP, dms., 100-lb. lots	lb.	4.00 -	—
Phenobarbital-sodium, USP, dms., 100-lb. lots	lb.	4.00 -	—
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt alld E. of Rockies	lb.	.15¾-	—
l.c.l., same basis	lb.	.16½-	—
tanks, same basis	lb.	.14 -	—
82-84% (cresol 16-18%), non-ret. drums, c.l., same basis	lb.	.15¼-	—
l.c.l., same basis	lb.	.16 -	—
tanks, same basis	lb.	.13½-	—
39° or above, tar distilled, non-ret. dms., c.l., same basis	lb.	.17¼-	.17¾
l.c.l., same basis	lb.	.18 -	.18½
tanks, same basis	lb.	.15½-	—
USP, synthetic, dms., c.l., frt. alld	lb.	.17¾-	—
l.c.l., same basis	lb.	.18½-	—
tanks, same basis	lb.	.16 -	—
Phenolphthalein, USP, or yellow, bbls., dms., 2,000-lb. lots.	lb.	1.10 -	—
smaller lots	lb.	1.12 -	1.17
Phenothiazine, NF, fib. dms., c.l., frt. adjusted	lb.	.53 -	—
over 2,100 lbs., same basis	lb.	.55 -	—
less than 2,100 lbs., same basis.	lb.	.57 -	—
Phenyl acetate, dms., 100-lb. lots, works	lb.	.50 -	—
Salicylate (see Salol.)			
Phenylacetaldehyde solution, 50%, bots.	lb.	2.40 -	2.70
100%, bots.	lb.	4.00 -	4.65
Phenylacetamide, 125-lb. dms., works	lb.	1.10 -	—
smaller dms., works	lb.	1.15 -	1.10
dl-Phenylalanine, dms., works	lb.	27.00 -	37.50
1-Phenyl-3-carbetnoxy pyrazolone-J, 250-lb. fib. dms., dlvd. E.	lb.	3.60 -	—
smaller dms., dlvd. E	lb.	4.00 -	—
Phenyldiethanolamine, dms., c.l., dlvd E.	lb.	.40 -	—
l.c.l., dlvd. E	lb.	.41 -	—
m-Phenylenediamine, dms., frt. alld.	lb.	.90 -	—
p-Phenylenediamine, redistilled, dms., works	lb.	2.00 -	—
tech., refd., dms., same basis	lb.	1.10 -	1.35
Phenylethanolamine, dms., c.l., works	lb.	.69¼-	—
l.c.l. same basis	lb.	70 -	—
Phenylethyl acetate, bots.	lb.	1.35 -	1.95
b-Phenylethylamine, dms., works, 1,000-lb. lots	lb.	1.10 -	—
smaller lots, works	lb.	1.15 -	1.40
Phenylethylphenyl acetate, bots	lb.	3.95 -	4.40
Phenylhydrazine base, CP, bots.	lb.	3.00 -	3.07
Hydrochloride, commercial, kgs., works	lb.	1.75 -	—
purified, bots., works	lb.	5.17 -	—
1-Phenyl-3-carbethoxy-pyrazolone-5, 250-lb. lots, dlvd. E.	lb.	1.70 -	—
smaller lots, dlvd.	lb.	2.00 -	—
o-Phenylphenol, dms., works	lb.	.20 -	—
p-Phenylphenol, bgs., c.l., works	lb.	.37½-	—
l.c.l., works	lb.	.42 -	—
Phloroglucinol, comi., fib. dms., works	lb.	6.40 -	—
C.P., bots., fib. dms.	lb.	17.00 -	17.25
tech., fib. dms works	lb.	10.45 -	—
Phosphate defluorinated (see under D. Rock, Curacao, Atlantic ports, New Orleans	ton.	43.00 -	—
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 70-68%, b.p.l., c.l., same basis	long-ton.	5.08 -	—
72-70%, b.p.l., c.l., same basis	long-ton.	5.68 -	—
75%-74%, b.p.l., c.l., same basis	long-ton.	6.68 -	—
77%-78%, b.p.l., c.l., same basis	long-ton.	7.68 -	—
finely ground, 65%, b.p.l., basis 30%, P_2O_5, minimum, bulk, c.l., mines	short-ton.	5.60 -	—
68%, b.p.l. basis 31% P_2O_5 minimum, mines	short ton.	5.80 -	—
70%, b.p.l. basis 32% P_2O_5 minimum, mines.	short-ton.	6.15½-	—
Plus or minus usual bonus adjustment clause for oil and labor. Prices on entirely pebble 50c. per long ton higher.			
Phosphorus, amorphous, red, cs.	lb.	.46 -	.47
dms.	lb.	.44 -	.45
yellow, cns., works	lb.	.48 -	.50
dms., c.l., works	lb.	.40 -	—
l.c.l., works	lb.	.43 -	—
Oxychloride, dms., c.l., works	lb.	.14 -	—
l.c.l., dms., works	lb.	.17 -	—
tankcars, works	lb.	.12½-	—
Pentasulfide, solid, dms., c.l., works	lb.	.11½-	—
l.c.l., dms., works	lb.	.13 -	.13½
Pentoxide, dms., c.l., works	lb.	.13½-	—
l.c.l. works	lb.	.16½-	—
Sesquisulfide, tins, cs., works	lb.	.29 -	—
export, dms.	lb.	.31 -	.36
Trichloride, dms., c.l., works	lb.	.14 -	—
l.c.l., works	lb.	.17 -	—
tankcars, works	lb.	.12½-	—
Phthalic anhydride, bgs, c.l., works, frt. equald.	lb.	.20 -	—
l.c.l., same basis	lb.	.21 -	—
tanks, same basis	lb.	.19¼-	—
Phthalimide, 97%-98%, dms., works, frt. alld.	lb.	.65 -	.70
frt. alld.	lb.	5.00 -	5.50
a-Picoline, ret., dms., c.l., works, frt. equald	lb.	.43½-	—
l.c.l., works, frt. equald.	lb.	.44 -	—
b,g-Picoline, 5°, dms., c.l., works.	lb.	.31 -	.32½
l.c.l., works	lb.	.32 -	.33
g-Picoline, 98%, dms., c.l., works.	lb.	2.65 -	—
Pilocarpine hydrochloride, NF, bots	oz.	5.25 -	—
Nitrate, USP, bots., vials	oz.	5.10 -	5.20
Pimento, Jamaican, bgs.	lb.	.61 -	.62
Mexican, bgs.	lb.	.58 -	.59
Pink root, bls.	lb.	3.00 -	3.25
d-Piperazine hexahydrate, French Codex, bots	kilo.	8.00 -	8.50
Piperidine, 98%, dms., frt. equald.			

CHEMICAL FOR TENITE BUTYRATE USED FOR NEW PLASTIC PIPE

VARNISH, SHELLAC AND PAINT



MOTOR OIL AND GASOLINE (ADDITIVES)

for a complete line of high quality petroleum chemicals

PETROLEUM

PARANOX
PARATONE
PARAFLOW
PARAPOID
PARADYNE
PARATAC
PETROHOL
Methyl Ethyl Ketone
Dewaxing Aid
Ethyl Ether
Isopropyl Ether
Reference Fuels

SURFACE COATING

PETROHOL 91
PETROHOL 95
PETROHOL 99
JAYSOL
Secondary Butyl Alcohol
Secondary Butyl Acetate
Isopropyl Acetate
Acetone
Methyl Ethyl Ketone
Dicyclopentadiene
Ethyl Ether
Isopropyl Ether
Naphthenic Acids
Iso-Octyl Alcohol
Decyl Alcohol
Denatured Ethyl Alcohol

CHEMICAL

PETROHOL 91
PETROHOL 95
PETROHOL 99
JAYSOL
Iso-Octyl Alcohol
Decyl Alcohol
Denatured Ethyl Alcohol
Tridecyl Alcohol
Dicyclopentadiene
Isoprene
Butadiene
Ethyl Ether
Isopropyl Ether
Tetrapropylene
Tripropylene
Aromatic Tars
Benzene
Acetone
Methyl Ethyl Ketone

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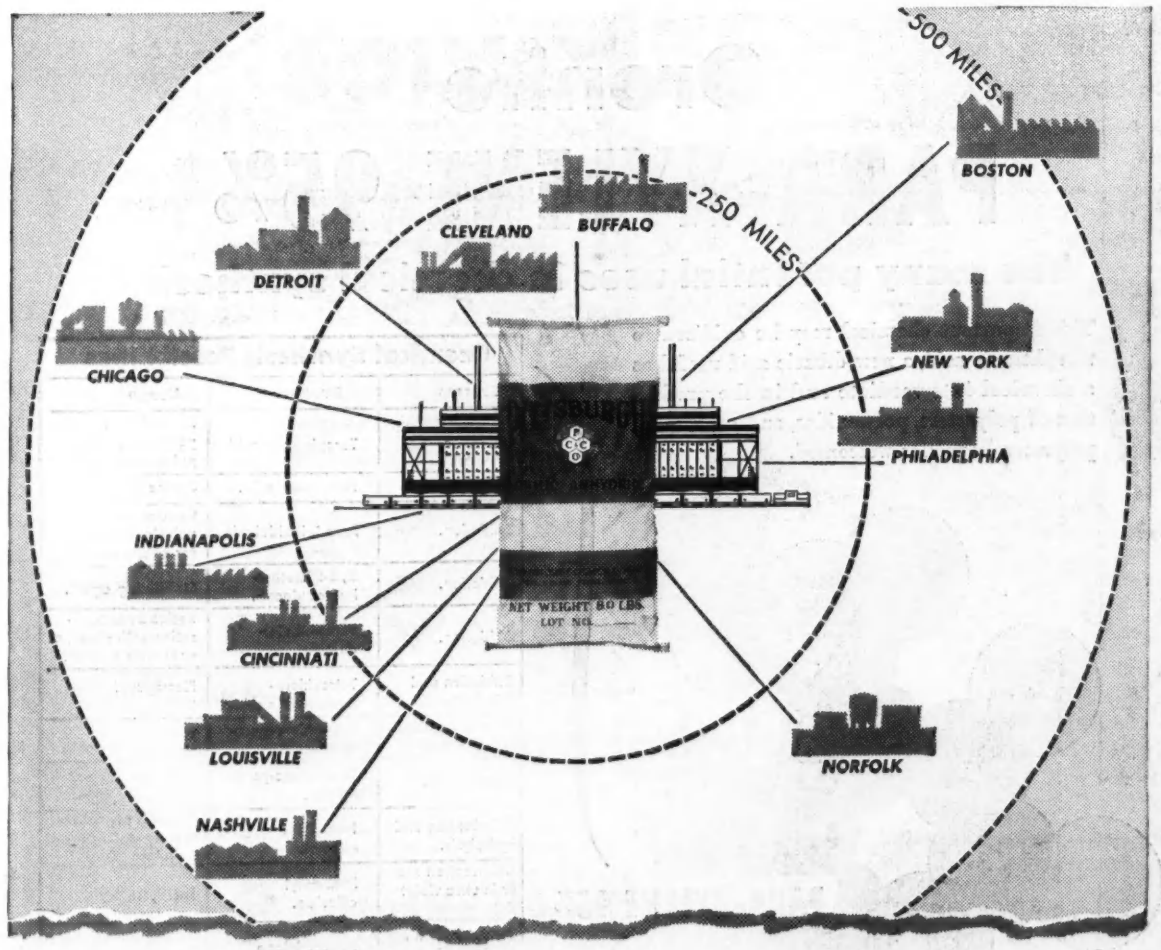
Piperonyl butoxide, dms., dlvd. E	lb.	4.50	5.30
Cyclonene, dms., dlvd. E	lb.	4.20	4.50
Pitch, coaltar, 140°-150° F. m.p., dms., c.l., works	ton.	41.20	-42.09
Cottonseed, raw, dms., works	lb.	.02¼	.03
Linseed, dms	lb.	.06	Nom.
Marine, dms	lb.	.04¼	.05
Petroleum (see Asphalt, petroleum).			
Soybean, dms., works	lb.	.05	Nom.
Tall, dms., works	lb.	.03¾	.04½
Plaster of Paris (see Gypsum).			
Platinum metal, works	oz.	84.00	-87.00
Pleurisy root, bls	lb.	.45	.50
Podophyllum resin, NF, dms	lb.	8.75	—
Poke root, bls	lb.	.19	.22
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works	lb.	.41	—
10,000-20,000-lb. lots, works	lb.	.43	—
smaller lots, works	lb.	.46	.48
tristearate, dms., 20,000-lb. lots, works	lb.	.41	—
10,000-20,000 lb. lots, works	lb.	.43	—
smaller lots, works	lb.	.46	.48
Poppy seed, Argentine, bgs	lb.	.16	.16½
Dutch, bgs	lb.	.19¼	.19½
Polish, bgs	lb.	.18½	.18½
Turkish, bgs	lb.	.16½	.17
Potash, caustic, regular, flake, 83-92% dms., c.l., works, 100 lbs		9.15	—
l.c.l., works 100 lbs.		10.20	—
liquid, 45% basis, dms., c.l., works 100 lbs.		4.25	—
l.c.l., same basis 100 lbs.		5.05	—
tanks, same basis 100 lbs.		3.70	—
solid, 88-92%, dms., c.l., works 100 lbs.		8.70	—
l.c.l., same basis, works, 100 lbs.		9.75	—
Potassium acetate, NF, dms	lb.	.31	.36
Bicarbonate, USP, gran., dms	lb.	.22	—
powd., dms	lb.	.24	—
Bichromate, bgs., c.l., works	lb.	.15	—
l.c.l., works	lb.	.15½	—
Potassium bichromate in drums ½c. higher.			
Bitartrate, NF, dom., gran. or powd., dms., c.l	lb.	.32	—
bbls., 5,000 lbs. 1 ship't.	lb.	.32½	—
smaller lots	lb.	.33	.36
imported, kgs	lb.	.24	.25
Bromate, bbls., 1,000 lbs. or more.	lb.	.50	.52
25-200-lb lots	lb.	.55	.57
Bromide USP gran., bbls., kgs.	lb.	.34	—
Carbonate, tech., calcined, bbls., c.l., works 100 lbs.		9.00	—
l.c.l., same basis 100 lbs.		10.05	—
hydrated, 83-85%, bbls., c.l., works 100 lbs.		7.60	—
l.c.l., works 100 lbs.		8.65	—
USP, gran., bbls., dms	lb.	.16½	.18
powd., bbls., dms	lb.	.21	.23
Chlorate, cryst., dms., c.l., works	lb.	.10¼	—
l.c.l., works	lb.	.11½	.12
powd., dms., c.l., works	lb.	.10¾	—
l.c.l. works	lb.	.12	.12½
export, dms., New York	lb.	.12¾	.13½
Nb gran dms	lb.	.32	.33
Chloride, USP, cryst., dms	lb.	.21	.23
gran., dms	lb.	.15	.17
powd. dms	lb.	.24	.26
Chromate, tech., bgs	lb.	.50	.50½
Citrate, USP, gran., dms	lb.	.41	—
powder, dms	lb.	.40½	.41½
Cyanide, dms., 500-lb. lots or more, works	lb.	.55	—
smaller lots, works	lb.	.57	—
Dichromate (see Potassium bichromate).			
Ferricyanide, kgs	lb.	.60	.63
Ferrocyanide, dms., ton lots	lb.	.22½	—
smaller lots	lb.	.23	—
kgs	lb.	.28	—
Fluoborate, fib dms., c.l., works, lb.		.30	—
l.c.l., works	lb.	.31	—
Fluoride, dms., works	lb.	.37	.38
Gluconate dms	lb.	.75	.79
Glycerophosphate, 75% solution cbys	lb.	2.15	2.25
Guaiacolsulfonate, NF, dms	lb.	2.10	2.30
Hydroxide, tech. (see Potash caustic).			
USP, pellets 100-lb. dms. 1 to 100-dm. lots	lb.	.28½	.33
Hypophosphite, NF, fib, dms., ton lots or less	lb.	1.00	1.03
Iodide, dms	lb.	2.15	—
Manure salt 22% K_2O, bulk, mines unit-ton		.21	—
Metabisulfite, gran., dms	lb.	.20	.21
powd. dms	lb.	.25	—
Muriate, dom. 50-60% K_2O, bulk, Carlsbad, N. M. unit-ton		.43	—
Trona, Cal. unit-ton		.53	—
50-51% K_2O paper sgs., Carlsbad, N. M. ton		25.75	—
Nitrate, cryst., bbls., 10-ton lots, 100 lbs		14.40	—
smaller lots 100 lbs.		14.65	-14.90
gran., bbls., 20-ton lots 100 lbs.		9.75	—
smaller lots 100 lbs.		11.10	-11.50
powd., bbls., 20-ton lots, 100 lbs.		10.75	—
smaller lots 100 lbs.		12.00	-12.50
NF, gran., dms	lb.	.09¾	.11¾
Potassium nitrate in bags, 50c. per 100 lbs. less in kegs, $1 more.			
Oxalate, neutral, tech., fine gran., bbls., dms	lb.	.30	.32
Pentaborate, gran., bgs., c.l., works	ton.	180.00	—
bbls., ton lots, ex whse	ton.	261.00	—
smaller lots, ex whse	ton.	266.00	—
Powdered Potassium pentoborate, $10.25 per ton higher			
Perchlorate, dms., c.l., works	lb.	.15	—
l.c.l., works	lb.	.16½	—
Permanganate, tech., dms., works	lb.	.22½	.23½
USP dms works	lb.	.24¾	.30¼
Persulfate, dms., 5-ton lots, works,	lb.	.21½	—
1-ton lots, works	lb.	.23½	—
Phosphate, tetrabasic, bbls., works	lb.	.16½	.18½
Prussiate, red (see Potassium Ferricyanide).			
yellow (see Potassium Ferrocyanide).			
Silicate, glass, bgs., c.l., works, 100 lbs.		17.00	—
l.c.l. 100 lbs.		17.80	—
solution, clarified, 29° Be, 1:2.5, dms., c.l., works 100 lbs.		5.80	—
l.c.l., 5 dms., or more, works 100 lbs.		6.55	—
tanks, works 100 lbs.		5.45	—
tech., 29° Be, 1:2.5, dms., c.l., works 100 lbs.		5.35	—
l.c.l., 5 dms. or more, works 100 lbs.		6.50	—
tanks, works 100 lbs.		5.00	—
40.5° Be., 1:2.0, dms., c.l., works 100 lbs.		6.45	—
l.c.l., 5 dms. or more, works 100 lbs.		7.20	7.60
tanks, works 100 lbs.		6.10	—
Silicofluoride, bbls., works	lb.	.09	.10
Stannate, dms., frt. alld. E	lb.	.682	.748
Sulfate, agricultural, 49-51% K_2O, bulk, works	ton.	37.25	—
NF VII cryst. dms	lb.	.31	.33
gran., dms	lb.	.18½	—
powder dms	lb.	.16½	.17
Sulfocyanide, NF, cryst., (see Potassium thiocyanate)			
Thiocyanate, NF, cryst., dms	lb.	.85	.94
tech., works	lb.	.77	.79
Titanate, ctrs., c.l., works	lb.	.14	—
5-ton lots, works	lb.	.14½	—
1-ton lot or less, works	lb.	.14¾	—
Potassium-magnesium sulfate, bulk, works basis 40% K_2SO_4, 18% MgO	ton.	16.00	—
Potassium-sodium tartrate, NF, gran., powd., dms., c.l.	lb.	.32½	—
5,000-lb. lots	lb.	.33	—
smaller lots	lb.	.33½	.38½
Potassium-titanium fluoride, fib, dms., works	lb.	.39	.40
Potassium-zirconium fluoride, fib, dms., c.l., works	lb.	.50	—
l.c.l., works	lb.	.52½	.55
Pregnenolone, bots	gm.	.60	—
Acetate, bots	gm.	.55	—
Progesterone, USP, bots., 100-gr. lots	gm.	.65	—
Acetate, bots	gm.	.70	—
Procaine hydrochloride USP, dms., frt. alld	lb.	3.10	3.40
Propane, commercial grade tanks, group 3	gal.	.03	—
n-Propyl acetate, dms., c.l., dlvd	lb.	.12¾	—
l.c.l., dlvd.	lb.	.13¾	—
tanks, dlvd	lb.	.1075	—
Gallate, dms., 100 to 2,000-lb. lots works	lb	3.90	4.40
p-Hydroxybenzoate, USP, dms	lb.	2.30	2.40
Thiouracil, bots., 50-kilo lots or more	kilo.	55.00	—
smaller lots	kilo.	55.10	-55.30
Propylene dichloride, dms., c.l., dlvd E.	lb.	.0645	.095
l.c.l., same basis	lb.	.0050	.1050
Glycol, industrial, dms., c.l., dlvd. E	lb.	.13¼	—
l.c.l., same basis	lb.	.14¼	—
tanks, same basis	lb.	.11½	—
USP, dms., c.l., dlvd. E	lb.	.15¼	—
l.c.l., same basis	lb.	.16¼	—
tanks, same basis	lb.	.13½	—
Propylene glycol methyl ether, dms., c.l., dlvd. E	lb.	.20	—
l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.18½	—
Oxide, dms., c.l., dlvd, E	lb.	.15½	—
l.c.l., dlvd. E	lb.	.16½	—
tanks, dlvd. E	lb.	.13½	—
Psyllium seed, black, bgs	lb.	.80	—
blonde, bgs	lb.	.18	.20
husks, bgs	lb.	.45	.50
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots	lb.	.03½	.04¼
smaller lots	lb.	.03⅞	.04½
imported, Italian, silk-screen, coarse, bgs., ton lots	lb.	.06½	—
fine, bgs., ton lots	lb.	.04	—
sun dried, coarse, bgs, ton lots	lb.	.02½	.04
fine, bgs., ton lots	lb.	.02½	.04
Pumice in bbls is ½c per lb higher.			
Pumpkin seed, bgs	lb.	.25	.26
Pyrethrin synthetic (see Allethrin).			
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bbls, works,	lb.	.50	—
powder 1.3% pyrethrins, bbls., works	lb.	.71½	—
liquid (20 to 1) basis 2 grams pyrethrins per 100cc. odorless base, 50 dms., works,	gal.	8.35	—
1-4 dms., works	gal.	8.55	—
Oleoresin, dewaxed, 20%, dms., works	lb.	9.80	-10.15
purified, 20%	lb.	10.00	-10.10
Pyridine, denaturing, dms., c.l., works and frt. equald	gal.	2.77	—
l.c.l., same basis	gal.	2.80	—
refd., 2°, non-ret., dms., l.c.l., same basis	lb.	.95	—

Piperonyl Butoxide—Quercitron Extract

Pyridoxine hydrochloride, bots., 100-gm. lots	gm.	.55	—
Pyrites, Canadian, works	long-ton.	3.00	5.00
Pyrocatechol (see Catechol).			
Pyrogallol, NF	lb.	3.25	3.43
Pyroxylin, scrap, ungrd., amber, dms., works	lb.	.20	—
black, dms., works	lb.	.12	—
mixed, mottled, dms., works	lb.	.13	—
shavings, amber, cs., works	lb.	No stocks.	
mixed colors, dms., works	lb.	.11	—
white, china, ivory, dms., works	lb.	.16	—
dense, opaque, dms., works,	lb.	.12	.15
translucent pastels, cs., works	lb.	.14	—
transparent colorless, dms, works,	lb.	.25	—
colors, dms., works	lb.	.15	—
USP, bots	lb.	9.50	—

Q

Quassia chips	lb.	.17	—
Quebracho extract, clarified, grd., 70% tannin, bgs., c.l.,	lb.	.16¼	.16¾
liquid, 35% tannin, bbls., tanks, works	lb.	.08¼	—
solid, 64% tannin, bgs., c.l., exdock, duty extra	lb.	.12½	—
ordinary, 63% tannin, bgs., c.l. same basis	lb.	11 31/64	—
Quercitron extract, crystals, No. 1, bbls., l.c.l.	lb.	.40	—
liquid, No. 1, bbls., l.c.l.	lb.	.19	—



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Ammonium Sulphate
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Naphthalene Phenol Phthalic Anhydride
alpha-Picoline beta, gamma-Picoline
Hydrochloric Acid Isonicotinic Acid
Pyridine
Toluene Xylene Xylenol
Sulphuric Acid—66° and Oleum

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PITTSBURGH
COKE & CHEMICAL CO.
Grant Building · Pittsburgh 19, Pa.

COAL CHEMICALS • AGRICULTURAL CHEMICALS • FINE CHEMICALS • PROTECTIVE COATINGS • PLASTICIZERS • ACTIVATED CARBON • COKE • CEMENT • PIG IRON

Quicksilver—Soda, Caustic, Flake

Quicksilver (see Mercury metal).
Quince seed, bgs ..... lb. 2.00 Nom.
Quinidine, NF, V cryst., cns., 100-oz. lots oz. 1.15 - —
powd., precip., cns., 100-oz. lots. oz. 1.17 - —
Sulfate, USP, cns., 100-oz. lots. oz. .87 - —
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate, USP, cns., 100-oz. lots oz. .37½- —
Dihydrochloride USP cns oz. .54 - —
Ethylcarbonate, NF, cns., 100-oz. lots oz. .63½- —
Hydrobromide NF cns. 50-oz cns. oz. .47½- —
Hydrochloride, USP, cns., 100-oz. lots oz. .47½- —
Phosphate NF, cns. 100-oz. lots.oz. .61 - —
Salicylate NF, cns., 100-oz. lots.oz. .55 - —
Sulfate, USP, cns., 100-oz. lots.oz. .42 - —
Quinine and Urea hydrochloride NF, cns oz. .56 - —
Quinolin, dms., c.l., frt. equald lb. .50¾- —
l.c.l., same basis ..... lb. .51¼- —
tanks, same basis ..... lb. .50 - —

R

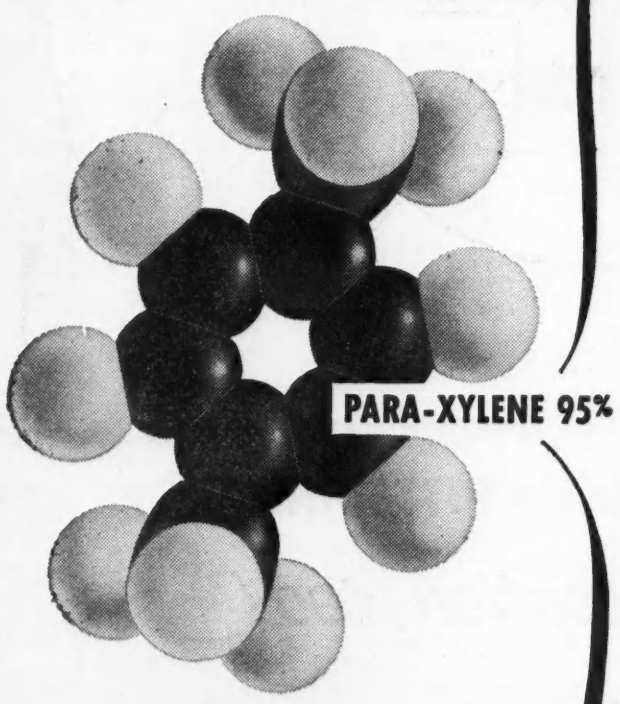
R salt, paste, 100% basis, dms., frt. alld lb. .83 - —
powd., basis 100%, frt. alld lb. .88 - .93
Red, BON acid maroons, pure, bbls. lb 1.75 - —
resinated, bbls ..... lb 1.50 - —
arylid, deep shades, bbls ..... lb 3.60 - —
light shades, bbls ..... lb 2.75 - —
maroon, bbls ..... lb. 3.60 - 5.90
Red, cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies lb. 4.30 - —
light shade, same basis lb. 4.00 - —
medium shade, bbls., same basis lb 4.25 - —
medium-light shade, bbls., same basis lb. 4.05 - —
orange shade, bbls., same basis lb. 3.95 - —
lithopone, deep shade, bbls., same basis lb. 1.93 - —
light shade, bbls., same basis. lb. 1.70 - —
maroon shade, bbls., same basis lb. 2.05 - —
medium shade, bbls. same basis lb. 1.85 - —
medium-light shade, bbls., orange-red shade, bbls, same basis lb. 1.64 - —
Red cadmium lithopone all shades, in smaller pkgs., 5c. per lb. higher; all prices are 1c. per lb higher ex whse. Los Angeles and San Francisco.
Carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar).
same basis lb. 1.77 - —
Eosin toner, bbls., works ..... lb. 1.60 - —
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N Y lb. .12¾- —
Iron oxide, natural, 75%-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley, O., Easton, Pa., East St. Louis lb. .06 - —
synthetic, 98% ferric oxide, bgs., c.l., works lb. .12¾- —
l.c.l., works ..... lb. .13 - —
Red, lake C toner, alizarin, bbls., works lb. 1.10 - 1.30
Lithol, toner, bbls., works ..... lb. .79 - —
rubine, toner, pure, bbls., works lb. 1.50 - —
resinated, bbls., works lb. 1.40 - —
Virginia-type, bbls. works lb. 1.40 - —
Maroon toner, MNPT, kgs., works. lb. 3.60 - —
10,000-lb. lots, works lb. 4.22 - —
smaller lots, works ... lb. 4.24 - —
Metallic, bbls., c.l., works ..... lb. .02½- —
l.c.l. works ..... lb. .02¾- —
Oxide (see Red iron oxide).
Persian gulf, bgs. c.l. works lb. .06¾- —
l.c.l., works ..... lb. .07 - —
Para toner, bbls ..... lb. .95 - —
Chlorinated, kgs ..... lb. 1.10 - 1.15
Phloxin toner (see Red eosin toner).
Rhodamine, molybdated, PMA, kegs lb. 5.35 - —
tungstated, PTMA, works, kegs. lb. 5.95 - —
Spanish, oxide, bbls., c.l., ex dock lb. .05¾- —
l.c.l., ex dock lb. .06 - —
ex whse., New York lb. .06½- —
Toluidine toner, deep shades, kgs., works lb. 1.50 - —
light shades, kgs., works lb. 1.50 - —
Turkey, bbls., works ..... lb. .60 - —
Tuscan, bbls., frt. equald .. lb. .24½- .25
Venetian, 15%, bgs., works. lb. .0350- .037
20%, bgs., works ..... lb. .0475- —
25%, bgs., works ..... lb. .0525- —
30%, bgs., works ..... lb. .0550- —
35%, bgs., works ..... lb. .0575- —
40%, bgs., works ..... lb. .0625- —
Watchung-type, bbls. ..... lb. 1.95 - —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red).
Red saunders, NF, powd. bbls lb. .35 - .40
Rennin, NF, powder ..... lb. 6.25 - —
Resorcinol, tech. grade, dms., c.l., works lb. .77½- —
l.c.l., works ..... lb. .78½- —
USP, cryst., dms., works ... lb. 2.75 - —
powd., dms., works ..... lb. 2.95 - —
Monoacetate, NF, dms. ..... lb 3.25 3.45
Rhatany root, bgs. ..... lb. .15 .16
Rhodinol, 5-lb. cans ..... lb. 25.00 -56.00
Rhubarb root, China, whole, cs lb. .75 - .85
powd., bbls. ..... lb. .90 - .95
India, whole, bgs. ..... lb. .35 - .40
powdered, bbls. ..... lb. .43 - .45
Riboflavin USP bots., dlvd kilo 100.00 —
readily soluble, bots., dlvd. kilo. 130.00 - —
5'-phosphate-sodium, 100 grams or more kilo. 140.00 - —
Rochelle salt (see Potassium-sodium tartrate).
Rosin, gum and wood (see Naval Stores, Protective Coatings market)
Rotenone, CP, bbls., works ..... lb. 20.00 - —
tech. bbls. works lb 16 50 —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03 - —
ton lots, same basis ..... lb. .04 - —
Rutin, NF, fib. dms., 25-kilo lots. kilo. 25.00 —
10 to 25-kilo lots ..... kilo. 25.00 -30.00
1 to 10-kilo lots ..... kilo. 30.00 - —
Ryania, 100%, powd., bgs., works, c.l. lb. .22 - —
l.c.l., same basis ..... lb. .24 - —

S

Sabadilla seed, powd., bbls. .. lb. .49 49½
activated ground with lime, bbls lb. .35 .36
Saccharin, USP, gran., soluble, dms., 1000-lb lots lb 1.60 —
smaller lots lb 1 70 1.80
powd., soluble insoluble, dms., 1000-lb lots lb 1.65 —
smaller lots lb 1 75 1.95
Saffron, Spanish, USP, tins ..... lb. 25.00 - —
Safrol, dms. ..... lb 1.15 - 1.50
Sage, Cretan, bgs. ..... lb. .11 - —
Dalmatian, bgs. ..... lb. .39 - .40
Italian, bgs. ..... lb. .15 - .15½
Sago flour, raw, bgs. ..... lb. .07 - .07½
refined bgs. ..... lb. .08¾- .09¼
Sal soda (see Soda sal).
Salol, NF, gran., bbls., kgs ..... lb. 1.10 - —
Powdered salol, 25c. higher.
Salt, rock, paper bgs., c.l. .100 lbs. .98 - —
Table, vacuum, common, fine, paper bgs., c.l 100 lbs. 1.12 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4, basis ton. 19.00 -20.00
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies, chips bgs. .65 - .66
powd., dms ..... lb. .75 - .76
Sanguinarine nitrate, bots oz 4.75 5.50
Santonin, NF, dom. cryst., powd. cns., dms lb. 76.50 -80.00
imported, cryst., powd. cns lb. 76.50 -80.00
Sarsaparilla root, dom. bls lb 45 50
imported, Honduras, bls. ... lb. .45 Nom.
Mexican, bls. ..... lb. .35 Nom.
Sassafras root bark, ord., bls. ... lb. .50 - .55
select, bls. ..... lb. .65 - .67
Schaeffer's salt, paste dms., frt. alld., 100% basis lb. .85 - .95
powder, bgs., frt. alld ..... lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 12.25 -12.50
Seidlitz mixture, bbls., 5,000-lb. lots lb. .30½- —
smaller lots ..... lb. .31 .32
Selenium, powd., dms., dlvd. ... lb. 5.00 - 6.00
Senega root, bls ..... lb. 2.30 - 2.40
Senna leaves, Alex., whole and half, bls lb. .19 - —
siftings ..... lb. .17 - —
Tinnevelly, No. 1, bls ..... lb. .16 - .18
No. 2, bls. ..... lb. .13 - .15
No. 3, bls. ..... lb. .11 - .13
powdered, bbls., bxs ..... lb. .18 - —
pods, bls. ..... lb. .14 - —
Serpentaria root, bls ..... lb. 4.85 - 5.00
Sesame seed, Nicaragua hulled, ship't, bgs. lb. .28 - .29
natural, bgs. ..... lb. .18 - —
Salvadorian, natural ..... lb. .18½- —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .47 - —
bbls., 1,500-lb. lots ..... lb. .48 - —
kgs., 1,500-lb. lots ..... lb. .50 - —
refined, bgs., 1,500-lb. lots ... lb. .57 - —
bbls., 1,500-lb. lots ..... lb. .58 - —
kgs., 1,500-lb. lots ..... lb. .60 - —
Bonedry shellac prices for less than 1,500-lb. lots, 1c. per lb higher for all packages.
Lemon, No. 1, bgs., 10-bg. lots, lb. .41 - —
No. 2, bgs., 10-bg. lots ..... lb. .39 - —
Superfine, bgs., 10-bg. lots .... lb. .38 - .39
TN, bgs., 10-bg. lots ..... lb. .37 - .38
Shellac in 1 to 9 bg. lots, 1c. more.
Shingle stain oil (see Oil, shingle stain).
Silica, amorph., dry-grd., 325 mesh. bgs., c.l., works ton. 25.00 - —
l.c.l., works ..... ton. 30.00 -40.00
hard-quartz, 99½, 325 mesh, bgs., c.l., works ton. 20.00 - —
l.c.l., works ..... ton. 25.00 -30.00
140 mesh, bgs., c.l., works ton. 15.00 - —
l.c.l., works ..... ton. 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .16 - —
l.c.l., works ..... lb. .20 - .28¼
Silver bullion, ingots, cs ..... lb. .85¼- —
Cyanide, 6lb. dms., 2,500-oz. lots oz. .77⅛- —
1,000-oz. lots ..... oz. .77⅛- —
500-oz. lots ..... oz. .77⅛- —
100-oz. lots ..... oz. .78⅛- —
Nitrate, CP, crystals, bots., 2,500-oz. lots oz. .54¾- —
1,000-oz. lots ..... oz. .55 - —
500-oz. lots ..... oz. .56½- —
250-oz. lots ..... oz. .57 - —
USP granular silver nitrate, 4c. per oz. higher.
Proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.05 - —
strong, NF, bots., dms., 1,000-oz. lots oz. 1.00 - —
Soapbark, whole, bls. ..... lb. .28 - .30
crushed, bls., bbls. ..... lb. .32 - .33
powd., bbls ..... lb. .35 - .37
Soda ash, dense, 58% paper bgs., c.l., works 100 lbs. 1.75 - —
l.c.l., stock points 100 lbs. 2.85 - 4.62
bbls., c.l., works ... 100 lbs. 2.30 - —
l.c.l., stock points 100 lbs. 3.35 - 4.12
bulk, c.l., works ... 100 lbs. 1.45 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.65 - —
l.c.l. stock points 100 lbs. 2.75 - 4.52
bbls., c.l., works ... 100 lbs. 2.20 - —
l.c.l. stock points 100 lbs. 3.25 - 5.22
bulk, c.l., works ... 100 lbs. 1.35 - —
Soda, caustic, flake, powd., 76%, dms., c.l., works, frt. equald. 100 lbs. 4.10 - —
l.c.l., stock points 100 lbs. 5.30 - —

Oronite
PARA-XYLENE 95%
has many potential uses in chemical synthesis

This important chemical may be oxidized to terephthalic acid, a new dibasic acid useful as a chemical intermediate and in the production of polyesters, polyamides, and other high polymers. Inquiries welcomed.



Chemical Synthesis Possibilities		
Process	**Product**	**Usage**
Oxidation.	Terephthalic acid.	Formation of polyesters, polyamides, etc.
Oxidation.	Para-toluic acid.	Synthesis of dyes.
Oxidation.	Para-tolualdehyde.	Condensation with polyvinyl alcohol for adhesive resin.
Oxidation.	2, 5-Dimethyl-hydroquinone.	Stabilizing agent.
Oxidation.	Terephthalal-dehyde.	Resins by condensation with diamines or sodium acetate.
Oxidation and chlorination.	Tetrachloro-terephthalic acid.	Flameproof textiles.
Oxidation and chlorination.	Tetrachloro-para-toluic acid.	Alkyd resin modifier.
Chlorination.	Tetrachloro-para-xylene.	Dielectric, heat transfer medium.
Chlorination and hydrolysis.	Para-xylyl alcohol.	For xylyl phosphate. Waterproofing agent. Cellulose ethers.
Chlorination hot or in ultra violet light.	Para-xylyl chloride.	Lachrymatory.
Dichlorination at boiling or in ultra violet light.	Para-xylylene chloride.	Synthesis.
Chlorination and hydrolysis.	Para-xylylene glycol.	Modification urea-formaldehyde resins.
Chlorination in dark with iodine or iron as catalyst.	2-Chloro-para-xylene and 2, 5-Dichloro-para-xylene.	Solvent and/or intermediate.
Chlorsulfonation and reaction with ammonia.	Para-xylene 2-sulfonamide.	Aldehyde resins. Cellulose acetate solvent.
Nitration.	2-Nitro-para-xylene.	Solvent.
Nitration and reduction.	Para-xylidine.	Dyestuffs.
Dinitration.	2, 6-Dinitro-para-xylene.	Dye synthesis.
Sulfonation.	Para-xylene 2-sulfonic acid.	Intermediate.
Sulfonation.	Para-xylene 2, 5-disulfonic acid.	Dyestuffs.
Sulfonation and caustic fusion.	Para-xylenol (2, 5-xylenol).	Making dimethyladipic acid, antiseptics.
Acetylation in presence $AlCl_3$	2-Para-xylyl-methyl ketone.	Perfume bases. Pharmaceuticals.
Ethylation and dehydrogenation.	Vinyl para-xylene.	Molding compounds. Synthetic rubbers.

ORONITE CHEMICAL COMPANY

ORONITE CHEMICAL COMPANY
38 Sansome Street, San Francisco 4, California
30 Rockefeller Plaza, New York 20, New York
600 South Michigan Avenue, Chicago 5, Illinois
714 West Olympic Boulevard, Los Angeles 15, California
Mercantile Securities Building, Dallas 1, Texas

5870

Soda, caustic, liquid, 50%, sellers' tanks, works, dry basis, 100 lbs. 2.55 - —
rayon-type tanks works, dry basis 100 lbs 2.65 —
70% sellers' tanks, works, dry basis 100 lbs. 2.63 - —
rayon type, tanks, works, dry basis 100 lbs 2.75 —
solid, 76%, dms., c.l., works, 100 lbs. 3.70 - —
l.c.l., stock points 100 lbs 4.90 —
Sal bgs. c.l., works 100 lbs 1.40 —
l.c.l. works 100 lbs 1.70 —

Sodium acetate anhyd. bgs. c.l., works lb 12 —
dms., l.c.l., works lb. .12¾ - —
NF, gran., dms., works lb. .12½ - .16½
Alginate, NF, white powd., dms., ton lots, works lb. .87 - 1.30
refined, bbls., works lb. .83 —
p-Aminobenzoate, dms., 1,000 lb. lots or more lb. 2.40 - —
smaller lots lb. 2.45 - 2.50
p-Aminosalicylate, dms., 1,000 lb. lots or more, frt. adjusted. lb. 3.75 - —
smaller lots, same basis lb. 3.80 - 4.25
Antimoniate, bbls., c.l., dlvd. E lb. .26½ —
l.c.l., dlvd. E lb. 28 —
Arsenate, dms., c.l., works lb. .12½ —
c.l. dms works lb 13¾ 14¼
Arsenite, dms., c.l., works lb. .13½ —
l.c.l. dms works lb 14¼ 15¼
solution dms. works gal 70 1.10
Ascorbate dms., 25-50 kilo lots kilo.21.00 —
10-kilo lots kilo.21 35 —
5-kilo lots kilo.21 75 —
1-kilo lots kilo 22.00 —
500-gram lots, bots kilo.22.50 —
Benzoate, tech., bbls., dms., 100-lb. lots or more lb. .39 - —
USP, bbls., dms. 100-lb. lots, or more lb. 46 —

Bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.70 - —
l.c.l., works 100 lbs 3.70 - —
powd., bgs., c.l., works 100 lbs 2.30 - —
l.c.l., works 100 lbs 3.30 —
Bichromate, bgs., c.l., works lb. .11½ —
l.c.l., works lb. .12 - .13¼
Bifluoride, bbls., c.l., works, frt. equald lb. .17½ - —
l.c.l., same basis lb. .1790 - —
Bisulfate, bulk, c.l., works, 100 lbs. 2.00 —
dms., c.l., works 100 lbs. 2.65 3.85
l.c.l., works 100 lbs 3.05 3.65
Bisulfite, anhyd., bgs., c.l., works, 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - —
soln., 35°, bbls., c.l., works, 100 lbs 1.40 —
l.c.l., works 100 lbs 1.80 - —
Borate (see Borax).
Bromide, USP, bbls., kgs., works, lb. .34 - .35
Cacodylate, NF, dms. frs. lb 8.52 —
Carbonate, anhydrous (see Soda ash).
crystalline decahydrated (see Soda sal).
monohydrated bgs., c.l., works 100 lbs 2.90 - —
l.c.l., works 100lbs. 3.30 - —
Carboxymethyl cellulose (see CMC).
Chlorate, cryst., dms., c.l., works, lb. .08¾ - .
l.c.l., works lb. .10¼ - .11
Chloride, tech. (see Salt).
USP dms lb 05 .13
Chlorite tech. dms., works lb .58 .73
Chloroacetate, tech., dms., c.l., works lb. .24 —
l.c.l. works lb. .25 .26
Chromate, dms., c.l., works lb. .13¼ - —
l.c.l., same basis lb. .13¾ .15
Citrate, anhyd., dms lb. .60 .65
NF VIII, gran, dms lb. .26 - .30½
USP XIV gran., dms. lb. .29½ .34

Sodium citrate USP powd. prices ½c higher

Cyanate, dms., 1,000-lb. lots, works lb. .85 1.10
smaller lots, works lb 1.00 1.25
Cyanide flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .178 - —
over 1,000-lb lots lb. .188 - —
100-lb. to 1,000-lb. lots lb. .198 - —

Granular sodium cyanide 1c. higher.

Diacetate, 33-35% acidity, 250-lb. dms., works lb. .14 - —
l.c.l. lb. .14¾ - —
anhydrous, dms. c.l., works lb .17 —
l.c.l lb 17¾ - —
Dichromate (see Sodium bichromate).
Ferrocyanide, bgs., 10 ton lots lb. .13½ - —
smaller lots lb. .14 - —
Fluoride, white, 97%, bbls., c.l., works lb. .1250 - —
l.c.l. works lb 1290 - —
Formate, bgs., c.l., dlvd. E 100 lbs. 7.60 - —
l.c.l., works 100 lbs 8.65 - —
Gentisate 100-lb fib dms lb 8.50 —
Gluconate, refined, dms lb. .80 - .83
tech., dms lb. .35 - —
Glutamate, mono-, dms., c.l. lb. 1.55 - —
Glycerophosphate, NF, cryst., bbls lb. 2.10 2.25
powder, bbls lb. 2.15 2.30
solution, 75%, cbys lb 1.45 1.60
Hydride dms. works lb 2.00 3.00
Hydrosulfide (see Sodium sulfhydrate).
Hydrosulfite, dms., c.l., frt. alld. lb. .23 - —
alld lb. .23 - —
l.c.l., frt. alld. lb. .23½ - —
Hydroxide, tech. see Soda caustic)
NF pellets, 100-lb dms. 1 to 100-dm. lots lb. .18½ - .23
Hypophosphite, NF, dms., ton-lots, or less lb. .95 - .98
Hyposulfite, NF (see Sodium thiosulfate).
pea crystals, bgs 100 lbs. 4.50 - —
gran., bgs., c.l., works 100 lbs. 4.75 - 5.00
photo grade, bgs., c.l., works, 100 lbs. 4.50 - 4.75
l.c.l., works 100 lbs. 5.00 - 5.05
technical, bgs., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - 6.90

Sodium hyposulfite crystals in bbls., 50c. higher.

Iodide, USP bots., dms lb. 2.80 2.92
Lactate, edible, 50%, dms., cbys., works lb. .21½ - —
60% dms. cbys. works lb. .26½ - —
tech., 50% dms., cbys. works, lb 16¼ - —
Lauryl sulfate, dms., c.l., dlvd. lb. .22 - —
l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .20 - —
Metabisulfite (see Sodium bisulfite).
Metaborate, octahydrate, gran., bgs., c.l., works ton.78.50 - —
l.c.l., ex whse ton.124.50 - 129.50

Sodium metaborate, octanydrate in bbls., $24.50 per ton higher.

Tetrahydrate, c.l., bbls., works, ton.199.50 - —
Metallic, bricks, bbls., works lb. .17 - .19
tanks, works lb. .16 - —
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd. bgs., c.l., works 100 lbs. 4.85 - —
l.c.l., works 100 lbs. 5.20 - 7.10
dms., c.l. 100 lbs. 5.25 - —
l.c.l. 100 lbs. 5.60 - 6.00

Sodium metasilicate, pentahydrate, bgs., c.l., works 100 lbs. 4.00 - —
l.c.l., bgs., works 100 lbs. 4.35 - 4.75
dms., c.l., works 100 lbs. 4.40 - —
l.c.l., works 100 lbs. 4.75 - 5.15
Molybdate, bbls., cbys., works lb. .75 - .85
powd., anhyd., dms., works lb. .85 - .92
Monohydrate (see Sodium carbonate, monohydrated).
Naphthenate, bbls. lb. .70 - —
Nitrate, crude, dom., bgs., c.l., works ton.47.00 - —
bulk, c.l., works ton.43.50 - —
imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton.53.00 - —
bulk, c.l., same basis ton.49.50 - —
Nitrite, USP, bbls., c.l., works, frt equald lb. 0775 - —
l.c.l., same basis lb. 0925 - 18
Orthosilicate, conc. dms., c.l., works 100 lbs. 6.00 —
l.c.l., works 100 lbs. 6.35 - 6.75
hydrated flake bbls. c.l. works 100 lbs. 5.25 - —
l.c.l., dlvd. 100 lbs. 7.00 - —
Oxalate, 88%, bgs., works 100 lbs.10.85 —
Para-aminobenzoate (see Sodium p-Aminobenzoate).
Para-aminosalicylate (see Sodium p-Aminosalicylate)
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .25½ - —
l.c.l. same basis lb 28½ 28½
pellets, bgs., c.l., same basis lb. .25 —
l.c.l., same basis lb. .26 28
powdered, bgs., c.l., same basis, lb. .24 —
l.c.l. same basis lb. .25 - .27
Pentachlorophenate, 20,000 lbs. min. truckloads, ¼c. per lb. over carlot prices.

Sodium perborate, USP, tech., bbls., c.l., works lb. .193 - —
l.c.l. works lb. 198 - —
Peroxide, dms., c.l., dlvd. E. of Miss lb. .1860 - —
l.c.l. same basis lb. .1910 - .2010
Phenolsulfonate, USP IX, gran., dms lb. .44 - .45
powd., dms lb. .47 - .48
Phosphate, dibasic, anhyd., bgs., c.l. frt. equald 100 lbs 7.45 —
l.c.l., works 100 lbs 7.85 —
USP, dried powd., bgs., dms., works lb. .19 .20½
duohydrate, bgs., c.l., frt. equald 100 lbs 7.05 —
l.c.l., frt. equald. 100 lbs. 7.25 —
monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equald 100 lbs 8.90 —
tribasic, cryst., bgs., c.l., frt. equald 100 lbs. 4.20 - —
l.c.l. frt equald 100 lbs 4.60 - —
Sodium phosphates in dms. 60c higher than bgs.
Prussiate, yellow (see Sodium ferrocyanide).
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs.10.75 - —
ferric, dms., 1,500-lb. lots, works, lb. .31 - —
smaller lots, works lb. .32 - —
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
l.c.l. frt equald 100 lbs 8.10 —
Salicylate, USP, dms lb. .68 - —

Soda, Caustic, Liquid—Sodium Silicate

Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.10 - —
l.c.l., dlvd., zone 1 100 lbs. 3.85 - 4.10
zone 2 100 lbs 4.10 4.35
zone 3 100 lbs 4.40 4.65
zone 4 100 lbs 5.10 5.35

Sales zones are: (1) All States E. of Miss. R. and N. of south bound of Ky. and Va.; Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia. and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn.; Mo. (except St. Louis), Neb., E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°; N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo., and El Paso, Tex.

Sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.85 6.75
dms., c.l., works 100 lbs. 4.90 —
l.c.l., works 100 lbs. 5.25 5.65
Silicate liquid, 40° 1:3.2, turbid, dms., c.l., works 100 lbs. 1.35 - —
l.c.l., works 100 lbs 1.70 4.30
tanks, works 100 lbs. 1.00 —
47°, turbid, 1:2.9, dms., c.l., works 100 lbs. 1.95 —
l.c.l., dms., works, 100 lbs. 2.55 3.80
tanks, works 100 lbs. 1.60 —
52°, turbid, 1-2-3, dms., c.l., works 100 lbs. 2.30 —
l.c.l., works 100 lbs. 2.65 3.05
tanks, works 100 lbs. 1.95 —
solid, 1:3.2, bgs works ton 57.50 —

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SOLVAY'S TECHNICAL SERVICE IS DIFFERENT—because it is established on an *industry-wide* basis—with *special sections* for *different industries!* As a result we can offer our customers unique services that are not ordinarily available.

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Chlorine • Ammonium Bicarbonate • Sodium Bicarbonate • Ammonium Chloride • Snowflake® Crystals • Monochlorobenzene
Para-dichlorobenzene • Ortho-dichlorobenzene

Sodium Silicofluoride—Sumac Leaves

Sodium silicofluoride, bgs., c.l., works lb. .07 - —
l.c.l., works lb. .07 - .08
Sodium silicofluoride in dms., 4/10c. higher.
Stannate, dms., works, frt alld. E lb. .548 - .602
Sulfa drugs (see Sulfa name).
Sulfanilate, bbls., works lb. .22 - —
Sulfate, NF, VII, dried, powd., dms lb. .22½- —
tech., anhyd., bgs., c.l., works, frt. alld. to $10. 100 lbs. 2.35 - —
l.c.l., works, same basis 100 lbs 2.50 3.00
rayon grade, bgs., c.l., works, ton 29.00 - —
l.c.l., works ton 35.00 - —
USP, cryst, fib dms lb .17½ .18
gran, fib, dms lb. .17½ .18
Sulfide, flake, dms., c.l., works, E., frt. equald lb. .05¼- —
l.c.l., same basis lb. .05¾- —
fused, bbls., c.l., works, E., frt. equald lb. .04¾- —
l.c.l., same basis lb. .05¼- —
Sulfite, anhyd., bgs., c.l., works, 100 lbs. 3.00 - —
l.c.l. same basis 100 lbs 3.50 - —
powder, bbls., c.l., works 100 lbs 7.25 - —
l.c.l., works 100 lbs. 7.50 - —
Sulfocyanide, CP, (see Sodium thiocyanate).
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06½- —
l.c.l., works lb. .07 - —
liquid, 40-44%, tanks, works, 100% basis ton. 110.00 - —

Sodium petraborate (see Borax).
Tetrasulfide, liquid, 46%, dms., c.l., works lb. .03½- —
l.c.l., works lb. .04 —
Thiocyanate, CP, dms. lb. .55 - .65
tech., dms., works lb. .377 - —
Thiosulfate, NF, cryst., bbls lb. .12½- —
tech (see Sodium hyposulphite).
Titanate ctns, c.l. works lb. .10½- —
5-ton lots, works lb. .10¾- —
1 ton or less, works lb. .12 - —
Trichloroacetate, 98% 100-lb. dms., c.l., frt. alld., E lb. .37½- —
l.c.l., frt. adjusted, E lb. .39½- —
50-lb. dms., c.l., frt. alld. E lb. .38 - —
l.c.l., frt. adjusted, E lb. .40 - —
90%, 10-lb. cns., c.l., frt. alld., E lb. .44 - —
l.c.l., frt. adjusted, E lb. .46 - —
Prices on Sodium trichloroacetate West of the Rockies are 1¾c. per pound higher.
Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 8.03 - 8.25
l.c.l., same basis 100 lbs. 8.30 - 8.45
Trisilicate, powd., 1:32.2, bgs., c.l., works 100 lbs. 8.65 - —
l.c.l., works 100 lbs. 9.40 -12.80
dms., c.l., works 100 lbs. 9.05 - —
l.c.l., works 100 lbs. 9.80 -1025
Tungstate, tech., kgs., dlvd. E lb. 1.80 - —
Sodium ammonium phosphate, bbls., works frt equald lb 23 —
Sodium-carboxymethyl cellulose (see CMC).
Sodium cinchophen (see Cinchophen sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .22 - —
l.c.l., same basis lb. .22½- —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .28 —
smaller lots, same basis lb. .30 - —

Solvent naphtha, coaltar, refined, tanks, works gal. .31 - .32
high-flash, tanks, works gal. .31 - .32
petroleum (see Petroleum solvent, partial aromatic).
Sorbitan monostearate, fib, dms., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb. lots, works, lb. .34 - —
smaller lots, works lb. .37 - .39
Tristearate, fib, dms., 20,000-lb. lots, works lb. .33 - —
10,000 to 20,000-lb. lots, works. lb. .35 - —
smaller lots, works lb .38 - .40
Sorbitol, cryst., pellets, dms., c.l., works lb. .30 - —
1 to 5-ton lots, works lb. .32 - .33
powd., dms., 1 to 5-ton lots, works lb .38 .39
solution commercial, aqueous, dms., c.l., works lb. .24½- —
ton lots works lb. .25 —
smaller lots, works lb. .25¼- —
tanks, works lb .23¼- —
regular, 70%, aqueous, dms., c.l., works lb. .16 - —
ton lots works lb. .16¾- —
smaller lots, works lb. .17 - —
tanks, works lb. .15 - —
Soybean meal, 44% bulk, Decatur ton. 93.00 - —
protein, chemically isolated, 40-000 to 60,000-lb lots, dlvd. lb. .25 - —
20,000 to 40,000-lb. lots, same basis lb. .25¼- —
100 to 20,000-lb. lots, same basis lb. .25½- —
mechanically refined, bgs., 40,000-lb. lots, same basis lb. .0605- —
20,000-lb. lots, same basis. lb. .0620- —
smaller lots, same basis. lb. .0635- —

Sparteine sulfate, cns. oz. .85 - .95
Spearmint leaves, bls. lb. .75 - —
imported, bls. lb. 1.25 - —
Spruce extract liq. reg., tanks, works lb. .01¾- —
powd., super, bgs., c.l., works, lb. .05¼- —
l.c.l., works lb. .05½- —
Squill, red, (fortified, powd., bbls., boxes lb. 1.60 - —
white, bls. lb. .12 - .15
powd., bbls., bxs. lb. .16 - .21
St John's bread, edible, bls lb. .13 - .15
Stannic chloride, anhyd., dms., works lb. .762 - .772
Oxide, dms., dlvd. E lb. .97 - .98
Stannous chloride, anhyd., dms., works lb. .817 - 1.086
Hydrous (crystals), dms., works. lb. .85 - .89
Sulfate, dms., works lb. .935 - .975
Star root (see Helonias root).
Starch, corn, pearl, paper bgs., c.l., 100 lbs. 7.14 - —
l.c.l. 100 lbs. 7.29 - —
powd., paper bgs., c.l 100 lbs 7.26 - —
l.c.l. 100 lbs. 7.41 - —
Prices for corn starch in cotton bags 25c per 100 lbs higher
Potato, dom., Idaho, bgs., c.l., works lb. .063 - —
Maine, bgs., c.l., works lb. .06¼- —
l.c.l., spot lb. .07¾- .08¼
Rice, c.l., bgs lb. .16 .17
Wheat, bgs. lb. .0755- .0780
Stargrass root (see Aletris root).
Staves acre seed bgs lb. .60 .61
Stearine oleo (see Oleostearine.)
Stomach substance, not USP, fro. dms lb. 2.95 - 3.10
Stramonium leaves, bgs lb. .18 - .20
Streptomycin hydrochloride, bulk, gm. .17 - —
Sulfate, bulk gm. .17 - —
Strontium bromide, NF, cns., dms. lb. .77 - .78
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
1-ton lots, works lb. .37 - —
tech dms., works lb. .19 - —
Chromate, bbls., works lb. .46 - —
Iodide, jars, 25-lb. lots lb. 3.42 - —
Nitrate, bbls., cs., works lb .11 - .13
Salicylate NF dms lb 1.65 - —
Sulfate, air floated, 90% 325 mesh bgs., works ton 56.70 -66.15
Strophanthin, K, bots oz. 25.00 -25.50
G, (see Ouabaine, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax, USP, cs lb. .78 - .80
Strychnine, NF, powd., cns., 100-oz. lots oz. 1.10 - —
Phosphate, NF, cns., 100-oz. lots oz. 1.14 - —
Sulfate, USP, powd., cns., 100-oz. lots oz. .85 - —
Styrene monomer, dms., c.l., works, lb. .2¼- —
l.c.l., works lb. .23¼- —
tanks, works lb. .21 - —
Styrolyl acetate, bots lb. 1.45 - 1.70
Sucrose, refined, white, bgs., ref'y East 100 lbs. 8.80 - —
Octa-acetate, denaturing grd., 100-200-lb. bgs., l.c.l., works. lb. .76 - —
Sulfabenzamide, dms. lb. 4.00 - 4.50
Sodium dms lb 4.10 4.60
Sulfacetamide, fib, dms. lb. 4.00 - 4.20
Sodium fib dms lb 5.00 5.50
Sulfadiazine, USP, microcrystals, dms. lb. 10.60 -11.10
powder, dms. lb. 10.25 -10.75
Sulfadiazine-sodium, USP, dms. lb. 11.25 -11.75
micro crystals dms lb. 10.60 -11.10
Sulfaguanidine, USP, dms. lb. 2.50 - —
Sulfamerazine, USP, micro crystals. lb. 10.65 -11.15
Sulfamerazine-sodium, USP, dms., lb. 11.25 -11.75
Sulfametnazine, micro crystals, dms. lb. 8.90 - 9.40
powder, dms lb 8.50 9.00
Sulfanilamide, USP, 30-80 mesh., dms. lb. 1.40 - 1.60
microcrystals, dms. lb. 1.70 - 1.90
powder dms lb. 1.30 - 1.50
Sulfanilamide quinoxaline, veterinary, dms lb. 6.50 - 6.75
Sulfapyridine, NF, powd., bots., tins. lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms. lb. 7.50 - 8.00
Sulfathiazole, USP, micro crystals, dms. lb. 3.15 - 3.30
powder, dms. lb 2.80 - 2.95
Sulfathiazole-sodium, USP, dms. lb. 3.05 - 3.20
Sulfur, commercial, flour, bgs, mines 100 lbs. 2.30 - —
bbls., mines 100 lbs. 3.05 - —
lump, bgs., mines 100 lbs. 2.20 - —
bbls., mines 100 lbs. 2.65 - —
crude, bulk, c.l., mines, contract, long-ton. 26.50 - —
export, f.o.b. vessels, Gulf ports long-ton. 31.00 -33.00
domestic and Canada, f.o.b. vessel Gulf port long-ton. 28.00 -29.50
refined, flowers, USP, bgs., mines, 100 lbs. 4.00 - —
bbls. 100 lbs. 5.25 - —
flour, light, bgs., mines 100 lbs. 3.60 - —
bbls., mines 100 lbs. 4.50 - —
lump, bgs., mines 100 lbs. 3.30 - —
rolls, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.40 - —
salt block, bgs., mines 100 lbs. 3.50 - —
virgin block, bbls., mines 100 lbs. 3.45 - —
rubbermakers, com'l, regular, bgs., mines 100 lbs. 2.40 - —
bbls., mines 100 lbs. 3.55 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.50 - —
bbls., mines 100 lbs. 3.65 - —
refined, bgs., mines 100 lbs. 3.25 - —
bbls., mines 100 lbs. 4.30 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.70 - —
bbls., mines 100 lbs. 3.85 - —
10% pine tar, bgs., mines. 100 lbs. 3.90 - —
Dichloride, dms., c.l., works, frt. equald lb. .03¾- —
l.c.l., same basis lb. .04½- —
tankcars, same basis lb. .03½- —
Dioxide, liquid, com'l, cyls., works. lb. .09 - —
multi unit cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration, cyls., c.l., dlvd lb. .24 - —
Monochloride, 55-gal. dms., c.l., frt. equald lb. .03¾- —
l.c.l., same basis lb. .04½- —
tanks, same basis lb. .03½- —
Sumac leaves, 28%, bgs., ex-dock, ton. 130.00 - —
ground, ex-dock ton. 125.00 - —

A Better America — CHEMICAL PROGRESS WEEK-MAY 17-22 — Through Chemical Progress

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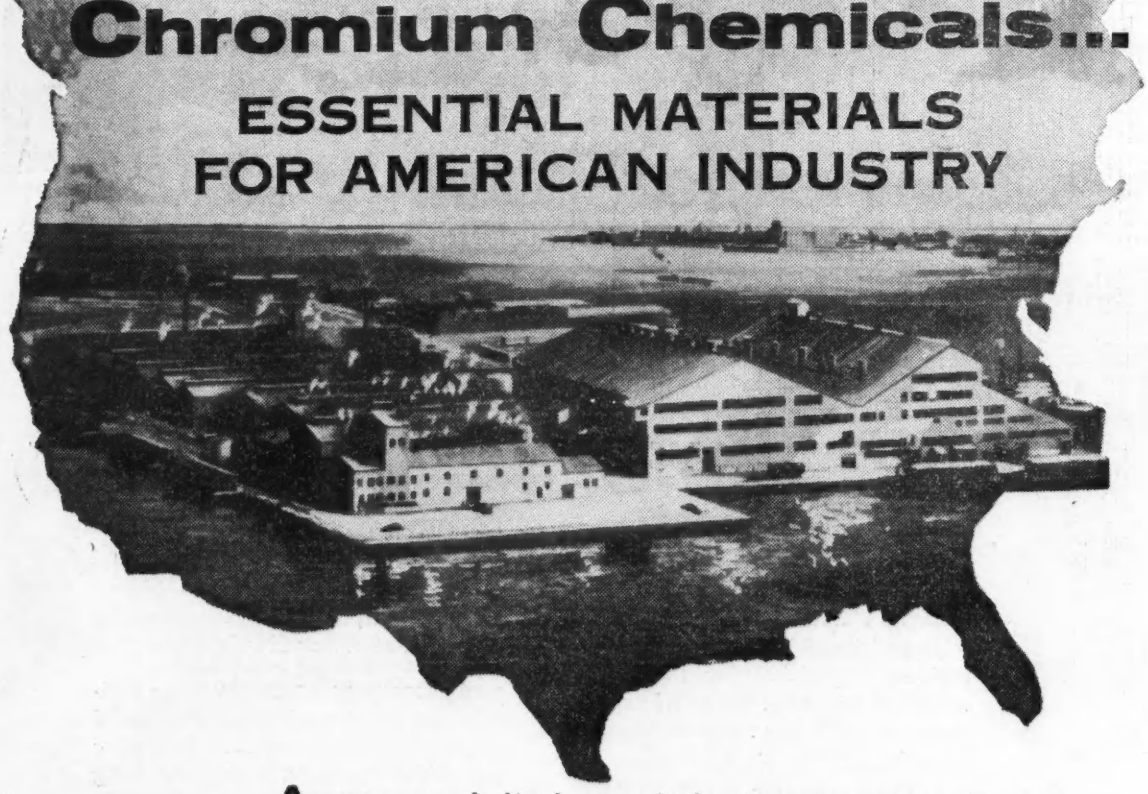

Sodium Bichromate
Chromic Acid
Sodium Chromate
Potassium Bichromate
Koreon

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T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.25 - —
l.c.l., same basis lb. 1.30 - 2.30
Isopropyl, ester, dms., c.l., works, frt. equald lb. 1.30 - —
l.c.l., works lb. 1.35 - —
Talc, dom. ordinary, Calif., grd., bgs., c.l., works ton 32.00 -33.50
Vermont off color grd., bgs. c.l. works ton 14.00 —
l.c.l. works ton 17.50 —
fibrous, New York, grd., bgs., c.l., works ton 25.00 -30.00
l.c.l. ton 28.00 -35.00
99.5%, 325 mesh, bgs., c.l. works ton 27.00 - —
l.c.l. works ton 30.00 -32.00
99.95% micronized, bgs., works ton 35.00 —
imp Canadian grd. bgs. c.l., mines ton 25.25 -35.00
Tallow, edible, tanks, dlvd lb. .15½- .16
inedible, extra, tanks, dlvd lb. .07⅜- —
fancy, bleachable, tanks, dlvd. lb. .07⅜- —
No. 1, tanks, dlvd lb. .07 - —
special, tanks, dlvd lb. .07⅛- —
sulfonated, 25%, bbls., l.c.l. lb. .08 - —
50%, bbls., l.c.l lb. .10 - —
Tankage, animal, feeding, 5-11% ammonia, bulk unit-ton. 8.50 - —
Chicago unit-ton. 9.50 - —
Tapioca flour, Brazilian, ex whse, bgs lb. .13 - .14½
Java, AAA, bgs, ex whse., bgs. lb. .07¼- .07¾
AA, bgs., ex-whse lb. .07 - .07½
Tar acid oil, 15-18% dms., c.l., trt equald gal. .47 - .49
l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28% dms. c.l. same basis, gal. .54 - .56
l.c.l. same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53%, dms., c.l., same basis, gal. .70 - .72½
l.c.l., same basis gal. .73½ - .74½
tanks, same basis gal. .62½ - —
Coal (see Coaltar).
Pine (see Pinetar)
Tartar emetic (see Antimony-potassium tartrate).
Terpine glycol ether, dms., c.l., works lb. .23½- —
l.c.l., works lb. .25½- —
tanks, works lb. .22 - —
Hydrate, com'l, bbls., c.l. lb. .24½- —
l.c.l. lb. .25 - .25½
NF, cryst., fib dms lb. .57½- .62
powd., fib. dms lb. .65 - .69
a-Terpineol, dms., l.c.l., dlvd. E lb. .19 - —
Terpineol, com'l, dms., c.l., South. lb. .13½- —
l.c.l. South lb. .14 - —
extra, dms lb. .41 - .60
prime, dms lb. .30 - .45
Terpinyl acetate, extra, cns., dms. lb. .57 - .75
prime, dms lb. .55 - .70
Propionate, dms lb 1.75 - 2.00
Terra alba (see Gypsum).
Testosterone, USP, 100-gm. lots, bots gm. .79 - —
Propionate, USP, 100-gm lots, bots gm. .75 - —
Tetrachloroethane, dms., works lb. .14½- —
Tetrachloroethylene tech (see Perchloroethylene)
USP 55-gal lms, works lb .20½ .21½
smaller, dms, works lb. .23½ .25
Tetraethyl orthosilicate, dms., c.l., works lb. .71 - —
l.c.l. lb. .72 - —
Pyrophosphate, 40% cns., dms., frt. equald lb. .69 - —
Tetraethylenepentamine, dms, c.l., dlvd. E lb. .57½- —
l.c.l., dlvd E lb. .58½- —
tanks dlvd. E lb. .56 - —
Tetrapotassium phosphate (see Potassium phosphate).
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Thallium metal, dlvd lb 12.50 -15.00
Sulfate, 99%, bots., dlvd lb. 8.00 -13.00
Theobromine, NF fib dms lb 3.00 —
And sodium acetate, USP, fib dms lb. 3.55 3.90
Salicylate, fib dms lb 4.00 - —
Sodio-salicylate, NF, fib dms lb 2.90 - —
Theophylline anhydrous or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, regular or ampul-type, fib. dms. kilo.135.00 - —
Mononitrate, USP, fib dms kilo.135.00 - —
Thiocarbanilide, dms lb .50 - .52
Thiodiphenylamine (see Phenothiazine).
Thiophene, dms., c.l., works lb. No stocks
Thiourea, tech., dms., c.l., works lb. .40 - —
l.c.l., works lb. .42 - —
Thorium nitrate, purified, fib. dms., 100-lb. lots or more, works lb 3.50 - —
dl-Threonine, bots., 1-kilo lots kilo.600.00 - —
Thyme, French, bgs lb .21 .25
Spanish, bls. lb. .12 - —
Thymol, fib dms lb 3.00 3.25
Iodide, NF, dms lb. 6.80 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Metal (Straits) lb. .94 - —
Oxide (see Stannic oxide).
Sulfate (see Stannous sulfate).
Tetrachloride anhyd. (see Stannic chloride, anhydrous).
Titanium dioxide anatase, chalk resistant, bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. lb. .23½- —
ceramic, bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. lb. .23½- —
regular, bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. lb. .23½- —
metallurgical, natural, granular, bgs., c.l., f.o.b. Jacksonville, Fla ton.120.00 - —
Niagara Falls, N. Y. ton.137.50 - —
2-ton lots, same basis ton.142.50 - —
ton lots, same basis ton.147.50 - —
Milled titanium dioxide $7.50 per ton higher
rutile, non-chalking, bgs., c.l., dlvd. E lb. .24½ —
l.c.l., dlvd E lb. .25½ —
Hydride, cns., works lb. 7.95 9.00

Titanium pigment, calcium-rutile base, bgs., c.l., dlvd. lb. .08¾- —
l.c.l., dlvd lb. .08⅞- —
Tetrachloride, tech., dms., c.l., works lb. .40¾- —
l.c.l., works lb. .43¾- —
tankcars, works lb. .39¾- —
Uva ursi leaves, bls lb. 12 .14
a-Tocopherol, bots kilo.225.00 - —
Acetate, bots kilo.225.00 - —
o-Tolidine base, distilled, kgs lb. 1.30 - —
Tolu balsam, cns lb. 4.00 - —
Toluene (see Toluol).
p-Toluenesulfonamide, flake, dms., frt. alld lb. .64 - .66
powder, works lb. .70 - —
solid, frt. alld lb. .61 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
l.c.l., same basis lb. .25 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid, dms., frt. alld lb. .60 - .61
Toluol, coaltar, industrial or nitration, tanks, works:—
Bethlehem, Pa. gal. .34 - —
Birmingham dist. gal. .32 - —
Chicago dist. gal. .35 - —
Cleveland, dist. gal. .34½ .35
Geneva, Utah gal 26 - —
Johnstown, Pa. gal. .32 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .33 - —
Minnequa, Colo gal. .32 - —
Philadelphia district gal. .34 - —
Pittsburgh dist gal. .32 - —
Sparrow's Point, Md gal. .34 - —
Terre Haute, Ind gal. .35 - —
Youngstown, Ohio gal. .32½ .33
Toluol, petroleum, industrial, 2° tanks, works:—
Albany, N. Y. gal. .35 - —
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Detroit, Mich gal. .35 - —
Houston, Tex. gal. .35 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —
2,4-Tolylenediamine, cryst., fib., dms., frt. alld lb. .94 - —
powder, same basis lb. 1.00 - —
Tonka beans, Angostura, cks lb. 1.65 - 1.80
Brazilian, Surinam, cs lb. 1.00 - 1.25
Totaquine, 100-oz. lots, cns oz. .42 - —
Toxaphene, dms., c.l., works lb. .17 - —
truckloads, works lb. .17 - —
ton to truckloads, works lb. .20 - —
smaller lots, works lb. .23 - —
Triacetin, dms., c.l., dlvd. E, of Rockies lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., dms., c.l lb. .40½- —
l.c.l. lb. .41½- —
tanks lb. .39 - —
Phosphate, dms., c.l., works lb. .52 - —
l.c.l., same basis lb. .53 - —
tanks lb. .50 - —
Tributylamine, dms., c.l., works. lb. .74 - —
l.c.l., same basis lb. .75 - —
tanks, same basis lb. .72 - —
Trichlorobenzene, dms., c.l., works, frt. alld. E lb. .14½- —
l.c.l., frt. alld E lb. .15½- —
tanks, frt. alld. E lb. .13 - —
Prices in the West 1¼c. higher.

Trichloroethylene, dms., c.l., or truckloads, works, frt. equald. lb. .11¼ —
dlvd. E lb. .12¼- —
l.c.l., dlvd. E lb. .13½- —
tanks, works, frt. equald lb. .10¼ —
dlvd. E lb. .11 —
Trichloroethane, dms., c.l., works. lb. .13 —
l.c.l., works lb. .13½ —
tanks, works lb. .11½- —
Tricholine citrate, 65% soln., ret. chys., works frt. adjusted lb. 1.40 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 —
l.c.l dlvd. lb .36 —
tanks, dlvd. lb. .33 —
petroleum, dms., c.l., dlvd lb. .35 —
l.c.l. dlvd. lb. .36 —
tanks, dlvd. lb. .33 —
Triethanolamine, dms., c.l., dlvd. E lb. .23¼- —
l.c.l., same basis lb. .24¼- —
tanks, same basis lb. .21¼- —
Triethylamine, dms., c.l., works, dlvd. E lb. .47 —
l.c.l., same basis lb. .48 - —
tanks, same basis lb. .45 - —
Triethyl phosphate, dms., c.l., works lb. .38 —
l.c.l., same basis lb. .39 —
tanks, same basis lb. .37 —
Triethylene glycol, dms., c.l., dlvd. E. lb. .18¼- —
l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .16½- —
Triethylenetetramine, dms, c.l., dlvd. E lb. .48½- —
l.c.l., dlvd. E lb. .49½ —
tanks, dlvd. E lb. .47 —

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*Produced exclusively by Warwick Wax Company, Inc. **Produced exclusively by the Sugar Cane Wax Enterprise for Warwick Wax Company, Inc.

Trimethylamine—Wormseed

Trimethylamine, 25-40%, dms., c.l., works, frt. equald., 100% basis. lb. .38 - —
l.c.l., works, frt. equald, 100% basis lb. .38½- —
tanks, works, frt. equald, 100% basis lb. .33 - —
Tripentaerythritol, bgs., l.c.l., works. lb. .37 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .40 - —
Triphenylguanidine, bbls. works lb. .90 - —
Tripropylene glycol, dms., c.l., frt. alld lb. .18¼- —
l.c.l., frt. alld lb. .19¼- —
Trisodium fluoroacetate (see Sodium fluoroacetate, tribasic)
Phosphate (see Sodium phosphate tribasic).
Trypsin, pharmaceutical, 1:80, dms., works lb. 5.00 - 5.50
dl-Tryptophane, fib. ctns., works. kilo.165.00 - —
Tuba root (see Cube root)
Tungsten metal, powd., 98.8%, dms., dlvd lb. 4.95 - —
Turpentine, gum and wood (see Protective Coatings market, Naval Stores).
Tyrothricin, USP, bots gm. .75 - .85

U

Urethane, USP, dms lb. 1.50 - —
Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, dom., 46% N, bgs., c.l., works. lb. .06 - —
l.c.l., works lb. .06½- —
45% N, bgs., c.l., 30 tons, frt alld. Kan. Neb., N. Dak. Okla. S. Dak Tex. and E. ton.154.00 - —
l.c.l., dlvd ton.162.00 - —
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va ton.128.00 - —
C grade, tankcars, same basis. ton.126.50 - —
37 grade, tankcars, same basis ton.155.50 - —

V

Valerian root, Belgian, bgs lb. .38 - .40
dl-Valine, dms., works lb.21.00 -27.50
Valonia beards, 40-42% tannin, bgs., ex-dock ton.65.00 - —
cups, 28-30% tannin, bgs., exdock. ton.49.00 -50.00
extract, powd., 62% tannin, bgs., exdock, duty extra lb. .09 - .09¼
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins lb. 9.50 -10.50
Mexican, cuts, tins lb. 9.25 - 9.75
whole, tins lb. 9.50 -10.50
Tahiti, cs. lb.10.00 - —
Vanillin, ex eugenol, tins, 25-lb. lots. lb. 6.50 - 6.75
smaller lots lb. 6.90 - 7.25
ex guaiacol, tins, 25-lb. lots lb. 3.00 - —
smaller lots lb. 3.05 - 3.15
ex lignin, tins, 25-lb. lots lb. 3.00 - —
smaller lots, tins lb. 3.05 - 3.15
Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E. lb. .17½- —
l.c.l., dlvd. E lb. .18½- —
tanks, dlvd. E lb. .15½- —
Butyl ether, normal, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Chloride monomer, cyls., frt. equald lb. .26 - —
tanks, same basis lb. .13¼ —
Ether, USP, anesthesia, bots., 50 c.c., hospitals, bot. 1.12 - —
75 c.s. bot. 1.56 - —
Ethyl ether, tech., dms., c.l., works. lb. .26 - —
l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Methyl ether, cyls., works lb. .23 - —
tanks, works lb. .20 - —

Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.

Trichloride (see Trichloroethane).
2-Vinylpyridine, dms., works lb. 1.50 - —
Vinyltoluene, dms., c.l., works lb. .20¼- —
l.c.l., works lb. .21¼- —
tanks, works lb. .19 - —
Viosterol, in alcohol, 1,000,000 D units per gm bots lots of 10 billion USP units, 1,000,000 units. .025 - —
lots of 1 billion USP units, 1,000,000 units. .03 - —
lots of less than 1 billion USP units 1,000,000 units. .035 - —
Viosterol, in nat., veg. oil, 400,000 to 1,000,000 D units per gm., bots., lots of 10 billion USP units, 1,000,000 units. .02 - —
lots of 1 billion USP units, 1,000,000 units. .025 - —
lots of less than 1 billion USP units, 1,000,000 units. .03 - —
Vitamin A, synthetic, acetate, crystalline, beads, 500,000 A units per gm., gram. .07¼- —
liquid, in oil, 1,000,000 A units per gm. 1,000,000 units. .12 - —
Palmitate, liquid 1,000,000-1,800,000 A units per gm. 1,000,000 units. .12 - —
in oil, 1,000,000 A units per gm 1,000,000 units. .12 - —
B (see Thiamine hydrochloride).
B_2 (see Riboflavin).
B complex, natural (see Rice bran concentrate and Yeast).
B_6 (see Pyridoxine hydrochloride).
B_{12} crystalline, gm. or 5 gm. vials. gram.245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 - —
C (see Acid, ascorbic).
D (see Oils, codliver and fish-liver, Calciferol, and Viosterol).
D_2 (see Calciferol).
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin).
H (see Biotin).
K, Active (see Menadione).
K, 25 gm. bots. gram. 4.50 - —
Violet methyl toner (see Blue methylviolet toner
V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root bark, bls. lb. 2.60 Nom.
Warfarin, 0.5%, dms., 50 lb lots, dlvd lb. 1.95 - —
25-49 lb. lots, f.o.b., N.Y., or Chi lb. 2.05 - —
5-24 lb. lots, cns., f.o.b., N. Y., or Chi lb 2.15 - —
Wattle bark, fair average, African, bgs., ex dock ton.98.00 - —
merchantable, bgs., ex dock.ton.94.00 - —
extract, liquid 35% tannin bbls., lb. .09¾- .10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .10 - —
S. Africa, 60% tannin, ex-dock, duty extra lb. .10 - —
Wax amorphous (see Wax microcrystalline).
Bayberry, bgs., spot lb. .42 - .45
Bees, crude, African, bgs. lb. .54 - .56
Brazilian bgs lb. No stocks.
Central American, bgs. lb. .55 - .57
Chilean, bgs. lb. .56 - .57
refined, bleached, white, bricks lb. .73 - .75
slabs lb. .72 - .74
yellow, bricks lb. .60 - .61
slabs lb. .59 - .60
Candelilla, crude, bgs. lb. .74 - .76
refined, bgs. lb. .77 - .79
Powdered candelilla, 20 mesh, 5c. per lb. higher; 80 mesh, 5½c.; 100-200 mesh, 6c.
Carnauba, chalky, bgs., ton lots, lb. .80 - .82
North Country, No. 2, bgs., ton lots lb. .88 Nom.
No. 3, Ceara, crude, bgs., ton lots lb. .82 - .84
refined, bgs., ton lots. lb. .84 - .86
Parnahyba, crude, bgs., ton lots lb. .84 - .86
yellow, No. 1 Ceara, bgs., ton lots lb. 1.12 - 1.14
No. 1, Parnahyba, bgs., ton lots lb. 1.15 - 1.17
No. 2, bgs., ton lots lb. 1.10 - 1.12
Powdered carnauba wax price differentials same as powdered candelilla.
Japan, bgs lb. .40 - .42
Microcrystalline, 170°-175°F., m.p., ASTM, penetration 15-20, amber, ctns., 20,000 lbs., group 3, works lb. .13 - .14
smaller lots, same basis. lb. .14 - .15
black, ctns., 20,000 lbs., same basis lb. .11½- .12½
smaller lots, same basis. lb. .12½- .13½
white, ctns., 20,000 lbs., same basis lb. .24 - .25
smaller lots, same basis. lb. .25 - .26
180°-185°F., m.p., ASTM, penetration, 7-11, amber, ctns., 20,000 lbs., same basis lb. .16 - —
smaller lots, same basis. lb. .17 - —
black, ctns., 20,000 lbs., same basis lb. .14½- —
smaller lots, same basis. lb. .15½- —
white, ctns., 20,000 lbs., same basis lb. .27 - —
smaller lots, same basis. lb. .28 - —
190°-195°F., m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis lb. .20 - —
smaller lots, same basis. lb. .20½- —
black, ctns., 20,000 lbs., same basis lb. .18 - —
smaller lots, same basis. lb. .18½- —
white, ctns., 20,000 lbs., same basis lb. .33½- —
smaller lots, same basis. lb. .34½- —
Montan, dom., refined, bgs. lb. .31 - .32
imported, crude, Bohemian, bgs lb. .13½- .14
German, bgs. lb. .14 - .14½
Ouricury, refd., bgs. lb. .98 - 1.00
Paraffin (see P).
Spermaceti, blocks, cs. lb. .25½- .31
cakes, cs. lb. .26½- .32
Sugar cane, dom., ref'd., slabs, works lb. .75 - .80
spot lb. .77¼- .82½
White lead (see Lead, white).
White pine bark, rossed, bls. lb. .20 - .22
White precipitate, USP, powd., dms. lb. 5.00 - 5.75
Whiting (see Calcium carbonate).
Wild cherry bark, thin, natural, bls lb. .18 - .19
rossed, bls lb. .19 - .22
Ginger (see Snake root, Canada).
Witch hazel bark, bls. lb. .16 - .17
leaves, bls. lb. .23 - .24
Woolfat, crude (see Degras).
USP (see Lanolin).
Wormseed, American, bgs. lb. .20 - .25
Levant, bgs. lb. 4.25 - 4.50

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CONOCO

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X

Xylene (see Xylol).
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works lb. .40 - —
56°-58°C., dms., l.c.l., works, frt. equald lb. .30 - —
45°-47°C., dms., c.l., same basis. lb. .212 - —
l.c.l., same basis lb. .215 - —
tanks, same basis lb. .199 - —
fractions, over 7°C. b.r., except meta, dms., c.l., same basis gal. .96 - —
l.c.l., same basis gal. .99 - —
tanks, same basis gal. .85 - —
meta fraction, over 7°C. b.r., ums., c.l., same basis gal. 1.01 - —
l.c.l., same basis gal. 1.04 - —
tanks, same basis gal. .90 - —
Xylidines, mixed, dms lb. .39 - .50
Xylol, coaltar, indust., tanks, works, Bethlehem, Pa gal. .34 - —
Birmingham district gal. .32 - —
Chicago district gal. .35 - —
Cleveland district gal. .35 - —
Geneva, Utah gal. .27 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .33 - —
Minnequa, Colo. gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .32 - —
Sparrows Point, Md. gal. .34 - —
Terre Haute, Ind. gal. .35 - —
Youngstown, O. gal. .32½ - —
petroleum, indust., tanks, works:—
Albany, N. Y. gal. .35 - —
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Houston, Tex. gal. .35 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —

Y

Yara yara, ens lb. 2.15 - 2.65
Yeast, brewer's, dry, USP, 50 Int'l B units per gram, 100-lb. dms lb. .47 - —
90 Int'l B units per gram, 100-lb dms lb. .52 - —
200 Int'l B units per gram, 100-lb. dms lb. .56 - —
300 Int'l B units per gram, 100-lb dms lb. .60 - —
Yellow, barium chromate, CP, bgs., l.c.l., dlvd N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island St. Louis St. Paul lb. .33 - —
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below
Benzidine, AAA, bbls., dlvd lb. 1.91 - —
AAOT bbls. lb 2.15 - —
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies lb. 2.85 - —
lithopone, all shades, bbls., frt. alld., E of Rockies lb. 1.15 - —
Cadmium yellows, Los Angeles and San Francisco ex whse 1c per lb. higher.
Chrome, CP, bbls., dlvd. N. Tenn., and N.C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .31 - —
Dlvd Ala., Fla., Ga., La. (Shreveport, 1¼c. higher); Miss., N. C., S. C., Penna., Dallas, Tex., 1¼c higher; Ft. Worth, Tex., 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln Omaha, St. Joseph, 1.6c. higher dlvd. Pac Coast; for Denver, Pueblo Salt Lake City Wichita prices are equalized with Chicago.
Hansa, 10 G, bbls., same basis, cnrome lb. 2.15 - —
G pigment, bbls lb. 1.91 - —
Iron oxide, natural, French type, bgs., c.l., works lb. .05¼ - —
Peruvian type, bgs., l.c.l. lb. .038 - —
pure, bgs., c.l., works lb. .10½ - —
l.c.l., works lb. .10¾ - —
Mercury oxide, bbls., 1,000-lb. lots, lb. 4.70 - —
smaller lots lb. 4.72 - —
Ocher (see Yellow, iron oxide, natural).
Zinc (chromate), bbls., dlvd lb. .25 - —
basic, dlvd lb. .30 - —
Yerba santa leaves, bls lb. .40 - —
Yohimbine hydrochloride, bots, tin. oz. 4.75 - 5.25

Z

Zein, bgs., 30,000-lb. lots, works lb. .38 - —
1,000 to 30,000-lb lots, works lb. .40 - —
smaller lots works lb. .43 - —
Zinc acetate, tech., bbls., dms., works lb. .27 - —
NF VIII, dms lb. .53 - —
Borate, bgs., c.l., dlvd. E. lb. .192 - —
l.c.l., dlvd E. lb. .202 - —
Chloride, NF, gran., dms lb. .42 - —
precipitated, powd., dms lb. .26 - —
solution 50% dms., c.l., works, 100 lbs. 5.50 - —
l.c.l., works 100 lbs. 6.10 - —
tanks, works 100 lbs. 4.85 - —
tech., fused, dms., c.l., works, 100 lbs. 10.10 - —
l.c.l., works, dms 100 lbs. 10.60 - —
gran., fib., dms., c.l., works 100 lbs 10.60 - —
l.c.l., works 100 lbs. 11.00 - —
Chromate (see Yellow, zinc).
Cyanide, kgs., 1,000-lb. lots or more, works lb. .523 - —
smaller lots, works lb. .543 - —
Dust, pigment, bbls., c.l., works, lb. .13½ - .13¾
l.c.l., works lb. .14½ - .14¾
Fluoride, bbls., works lb. .49 - .50
Hydrosulfite, dms., c.l., frt. alld. lb. .21½ - —
l.c.l., frt. alld lb. .22 - .37½
Metal, prime western slabs, E. St. Louis lb. .10¼ - —
Naphthenate, liquid, 8% Zn., dms., frt. alld lb. .24½ - —
10% Zn. dms., frt alld lb. .30 - —
Oxide, pigment, American process, lead-free, bgs., c.l., dlvd lb. .13½ - —
l.c.l., dlvd lb. .14½ - —
leaded 35%, bgs., c.l., dlvd lb. .14 - —
l.c.l., dlvd lb. .15 - —
50%, bgs., c.l., dlvd lb. .14¼ - —
l.c.l., dlvd lb. .15½ - —
French process, com'l green seal, bgs., c.l., dlvd lb. .15¼ - —
l.c.l., dlvd lb. .16¼ - —
red seal, bgs., c.l., dlvd lb .14¾ - —
l.c.l., dlvd lb. .15¾ - —
white seal, bgs., c.l., dlvd. lb. .15¼ - —
Zinc oxide, USP, etns., c.l., dlvd lb. .16¾ - —
l.c.l., dlvd lb. .17¼ - —
Zinc oxide Pac. coast prices 1c. higher.
Phenosulfonate, NF, gran., dms., lb. .39 - —
powd., dms lb. .42 - .49
Resinate, precip., dms., frt. alld. lb. .26¾ - —
Silicofluoride, bbls., works lb. .12 - .13
Stearate, tech., USP, etns., c.l., lb. .37 - —
l.c.l., lb. .38 - .42
Sulfate cryst., 22% Zn, bgs., c.l., works, frt. alld 100 lbs. 8.05 - —
l.c.l., same basis 100 lbs. 8.60 - —
flake, 25½% Zn., bgs., c.l., works 100 lbs. 5.60 - —
l.c.l., works 100 lbs. 6.35 - —
36% Zn, bgs., c.l., frt. alld. 100 lbs. 7.90 - 8.05
l.c.l., same basis 100 lbs. 8.65 - 8.80
powdered, monohydrate, bgs., dlvd. east, c.l. 100 lbs. 7.90 - —
l.c.l. 100 lbs. 8.65 - —
Zinc sulphate in bbls. 40c higher.
USP, gran., dms lb. .26 - —
Sulfide, pure, bgs., c.l., dlvd lb. .2530 - —
Undecylenate, dms. lb. 2.25 - 2.50
Yellow (see Yellow, zinc).
Zinc-ammonium chloride ogs., c.l., works 100 lbs. 9.65 - —
bbls., c.l., works 100 lbs. 10.25 - —
l.c.l., bbls., works 100 lbs. 10.75 - —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l. lb. .25½ - —
l.c.l. lb. .26 - .41½
normal, dms., l.c.l. works lb. .52 - —
Zircon (G), granular, bgs., c.l., works lb. .03½ - —
5 tons to c.l., works lb. .03⅝ - —
1 ton to 9,999-lb. lots, works, lb. .04 - —
smaller lots, works lb. .06½ - —
milled, bgs., c.l., works lb. .04½ - —
5 tons to c.l., works lb. .04⅝ - —
1 ton to 9,999-lb. lots, works, lb. .04⅝ - —
500 to 1,999-lb. lots, works, lb. .07½ - —
Zircon (G) in barrels, 1c. higher.
Zirconium acetate, 13% soln. ZrO_2, c.l., 30,000 lbs. minimum, works lb. .23 - —
Hydride ens., works lb. 7.25 - 11.50
Nitrate, dms., ex whse cwt. 6.50 - 7.00
Oxide, 92½%-99%, white, grd., bbls., or bgs., works lb. 1.50 - —
lump, electric-fused, bgs., c.l., works lb. .44 - —
5-ton lots, works lb. .44½ - —
1 ton to 9,999-lb. lots, lbs., works lb. .45 - —
CP, white, grd., bbls., or bgs., works lb. 1.50 - —
lump, electric fused, bags, 500 to 1,999-lb. lots, works lb. .45½ - —
smaller lots, works, lb. .48 - —
milled, electric-fused, bgs., c.l., works lb. .59 - —
5-ton lots, works lb. .59½ - —
1 ton to 9,999-lb. lots, works lb. .60 - —
500 to 1,999-lb lots, works lb. .60½ - —
smaller lots, works, lb. .63 - —
Oxychloride, cryst., etns., 5-ton lots, works lb .35½ - —

Warren Refining Announces Fire-Resistant Paint Product

A fire-resistant paint, which is said to provide a maximum degree of fire and flame protection when applied to interior walls, ceilings and trim surfaces, has been announced by Warren Refining & Chemical Company, Cleveland, Ohio.

The intumescent coating, called "Warco Duo-Tex," provides ideal protection against flash fires by forming an insulating blanket which shields combustible surfaces from the flame. The product, simple to use as ordinary paint, may be brushed or sprayed on, dries to a rich flat finish, and is washable. It resists mildew and fungus growth and will maintain its fire-retardant quality with age. The paint, now in volume production, will be available in white and twelve basic pastel shades, according to Warren.

Rinshed-Mason, Canada, Appoints

Rinshed-Mason, Canada, has appointed Gordon Johnston trade sales manager of Rinshed-Mason Company of Canada, Ltd., Windsor, Ontario. He is currently heading R-M's promotion of "Castle Tone" odorless household wall enamels.

CHEMICAL PROGRESS WEEK-MAY 17-22
A BETTER AMERICA THROUGH CHEMICAL PROGRESS

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Chemical Progress Report: 1904

—Continued from page 7

for any length of time, it will not be necessary to enumerate them further.

It was not until the time of the Revolution that the manufacture of salt was established as a premanent industry.

The salt springs of Central New York were first discovered about 1654 by Pere Le Moyne, a French Jesuit. They were not readily accessible, however, and were not developed in a commercial way until some time after the American Revolution, or nearly 150 years after their discovery.

The interruption of foreign trade by the Revolutionary War led to the organization of a great number of small establishments for the manufacture of salt along the Atlantic seaboard from Cape Cod to Georgia.

One of the most successful of these early salt manufactories was established on Quivet Neck, in the town of Dennis, Barnstable County, Mass., by John Sears, a mariner. This pioneer salt maker had probably become acquainted with the salt works along the Mediterranean or in the West India Islands and conceived the idea of making salt by the use of solar heat exclusively. This establishment, dubbed by the natives "John Sears' folly," was the first of a number of works in Barnstable county, where the salt industry subsequently developed into a large and flourishing business, in the early decades of the nineteenth century.

Revolutionary Price of Salt

During the Revolution common salt was the most prized of all commodities. The ordinary product that before the war sold for 2 shillings a bushel rapidly increased in price, and in 1776 was not to be had for 25 shillings a bushel.

Philadelphia, with the surrounding country, was severely affected by this scarcity and increase in the price of salt, and several attempts were made to establish salt works along the New Jersey coast. One of them, at Tom's River, was conducted for a time by Thomas Savage, and was, with a number of others, burned or demolished by the British troops during the war.

For some time after the Revolution, salt in the country west of the Allegheny Mountains was worth "a cow and a calf" a bushel. This was the prevailing price until some time after 1790, when salt from the Onondaga salines was introduced and this, for a number of years, supplied a large portion of the western country. As late as 1815 salt in Cincinnati was quoted at from $3 to $5 a bushel, while the earlier settlers were obliged to pay as much as $7 and $3 for a very inferior quality. Salt was made on the Wabash, in the Indiana territory, early in the nineteenth century.

Salt Production in Pennsylvania

The manufacture of salt was also commenced in Western Pennsylvania about 1812 and this led to the establishment of a number of similar works in Southern Ohio and also in what is now West Virginia.

Another substance of a chemical nature that was absolutely essential to the colonists was gunpowder. The manufacture of this product was attempted at an early date, the first available record being in 1639, when Edward Rawson was granted 500 acres of land at Pecoit, Mass., to aid him in developing the manufacture of this very essential article.

In 1624, to promote and perfect the making of gunpowder, it was directed that every plantation within the Colony of Massachusetts should erect a suitable house to make saltpeter. There are several additional records of early powder mills in Massachusetts, as well as in other colonies, but none of them appear to have been continued for any length of time.

The exportation of powder and its materials from England was prohibited by an order in Council, of October 19, 1774, so that the American Colonies were made dependent on other resources for their supply.

The Continental Congress, in various ways, encouraged the erection of powder mills, and also the production of nitrate of potash. Congress, in 1775, published a manual giving directions for making saltpeter, and about the same time the "Commitee of the City and Liberties" erected a large saltpeter works on Market street for the double purpose of making saltpeter, and also to instruct such as were willing to engage in the making of this very necessary article for the powder mills.

Similar works were also erected in Boston by Dr. Whitaker and by others in different places.

As a further source of supply the ground about the tobacco warehouses in Virginia and Maryland was dug up and leached out and considerable quantities of potassium nitrate were obtained in this way.

In this same connection it may be interesting to note that, during the War of 1812, a very large amount of saltpeter was obtained by leaching out the deposits in the limestone caves of Kentucky.

The manufacture of gunpowder was very extensively carried on during the Revolution in nearly all of the American Colonies. A very large proportion of this powder, however, was made in Pennsylvania. Philadelphia was among the first places in which mills were successfully operated.

Continental Powder Mill

Early in the Revolution a public powder mill was established in or near Philadelphia by the Assembly, while Congress opened, and for some time operated, what was known as "The Continental Powder Mill." Congress also offered advances to such persons as would be willing to establish powder mills within fifty miles of Philadelphia, and this offer was taken advantage of by many who subsequently supplied a liberal proportion of the powder used in the Continental Army.

Probably the oldest of the still existing powder mills was established about 1802 by Eleuthere Irenee duPont, who came to this country from France in 1799. DuPont established his first mill on the Brandywine, about four miles above what was then the village of Wilmington. Having had some experience in the manufacture of gunpowder in France and being able to produce a quality much superior to that in use in this country at that time, he soon established a business that developed into the most extensive of the kind in the country.

Philadelphia and Philadelphians have taken a very important part in the origin and development of chemical industries of all kinds. Probably the first to inaugurate the manufacture of chemicals, as such, in this country, was the firm of Christopher, jr., and Charles Marshall, sons and successors of Christopher Marshall, an early druggist and one of the original "fighting Quakers" of Philadelphia. This firm had, as early as 1786, entered quite extensively into the business of making muriate of ammonia and Glauber's salt. The factory is described by Watson in his "Annals of Philadelphia" as being a grim and forbidding looking building on Third street near the stone brige over the Cohocksink Creek. This firm is said to have developed an annual output of upward of 6,000 pounds of muriate of ammonia; quite an achievement for that time.

White Lead Beginnings

The manufacture of white lead was commenced by Samuel Wetherill, another Philadelphia druggist, about 1789. This business rapidly developed, despite the reputed opposition of English manufacturers. In 1809 extensive works were opened at or near the corner of Broad and Chestnut streets. These being destroyed by fire a new plant was erected at the corner of Twelfth and Cherry streets. This for a number of years was the site of the now very extensive manufacture of white lead and color pigments. After the enforcement of the Embargo act, which preceded the War of 1812, a number of manufacturers engaged in the manufacture of white lead and paint. Among these was Dr. Joseph Strong, who undertook the manufacture of various lead pigments at his laboratory, 485 North Third street, opposite the Globe Mills. Joseph Richards, about 1812, established a factory on Race street near the Schuylkill River. This was later removed to Pine street above Broad, where he was succeeded by the two brothers, Mordecai and Samuel N. Lewis, who developed a large and lucrative business. Harrison Brothers were also among the first to engage in the manufacture of white lead. The founder of this firm, John Harrison, was probably the first to manufacture sulphuric acid in the United States.

First Sulphuric Acid

Sulphuric acid has been, quite properly, called the basis of all chemical industries. It is for this reason that the credit for establishing chemical industries in the United States is frequently accorded to John Harrison, a Philadelphia druggist, who, about 1793, was the first to produce sulphuric acid in a commercial way.

Mr. Harrison sold out his drug business in 1806 and devoted himself exclusively to the manufacture of acids and chemicals. It was not long before others followed in the manufacture of the heavy acids. In Philadelphia, Farr & Kunzi were probably the first to follow the example of Mr. Harrison. They engaged in the manufacture of sulphuric acid about 1812 and were soon followed by Wetherill & Brothers, who opened a manufactory of oil of vitriol on the east bank of the Schuylkill River. Mr. Harrison was also the first in this country to have and to use a platinum still. The still was constructed by a Dane, Erick Bolman, who appears to have been a man of more than ordinary attainments and who was particularly well versed in metallurgy.

Charles Lennig is said to have been the first to enter into the manufacture of sulphuric acid on a large scale, and he was also the first to use platinum stills so arranged that the operation was practically continuous and automatic.

Charles Lennig was the founder of the well known firm of Nicholas, now Charles Lennig & Co. He began operations about 1831, and in addition to the heavy acids made a number of chemicals for the use of textile manufacturers and dyers.

Textile Industry Development

The development of the textile industry in different sections of the New England states created considerable demand for a number of chemical substances, particularly sulphuric and muriatic acids, and the salts commonly used in bleaching and dyeing. This demand brought about the establishment of chemical manufactures in the same locality. The plants at Roxbury and Salem, Mass., were probably among the first to be established in New England.

The first to manufacture acids and heavy chemicals west of the Allegheny Mountains was Eugene Grasselli, who built a large laboratory and established a successful business some time between 1820 and 1850. He was followed some years later by Harwood & Marsh, also in Cincinnati. Other manufacturers followed, and about the year 1850 sulphuric acid was being made in Pittsburgh, Pa.; Steubenville, O.; St. Louis, Mo.; New Orleans, La., and probably in other towns and cities west of the Allegheny Mountains.

The commercial restrictions that preceded the War of 1812 were the direct cause of firmly establishing a number of chemical manufactures as permanent industries.

Introduction of Copperas

Among the chemicals, the manufacture of which was introduced about this time, is copperas. This was first made at Strafford, Vt., about 1810, from native pyrites. Copperas was also made at a very early date at Pequannock, Morris County, N. J., and about the year 1811 works were opened on the Magothy River, Md., by Richard Colton and others. About three years later the manufacture of alum was added, and the works were then put in charge of Gerard Troost, a Hollander by birth, who, though undoubtedly a poor businessman, was a scientist of exceptional attainments and abilities. Gerard Troost was one of the founders of the Academy of Natural Sciences of this city. He was an able geologist, an excellent chemist and an efficient teacher. He was, about 1823, professor of chemistry at the Philadelphia College of Pharmacy. Later, he was for some years one of the professors in the University of Nashville and also served as geologist to the State of Tennessee.

Epsom salt is said to have been made in this country as early as 1790 in the town of Bridport, Addison County, Vt., from the waters of a mineral spring discovered by the Rev. Sylvanus Chapin. The same substance was also made at quite an early date in or near Baltimore, Md., from native magnesite, while in Barnstable County, Mass., Epsom and Glauber's salt were early obtained as by-products in the manufacture of salt.

In the first copy of the "American Journal of Pharmacy," then called the "Journal of the Philadelphia College of Pharmacy," published in 1825, Daniel B. Smith describes at some length the details of the manufacture of Epsom salt in Barnstable County, Mass. The credit for developing this particular portion of the industry is said to be due to the Rev. Mr. Briggs, who is described as being an industrious and ingenious chemist.

The Epsom salt of that early day was quite different in appearance, and also in price, from what we would expect at present. It was usually wet and soggy, always impure and, not infrequently, mixed with, or sometimes substituted by Glauber's salt. The difference in the price, in the early decades of the last century, made this quite a profitable form of adulteration. Epsom salt selling regularly for 15 cents a pound, while Glauber's salt could be had for from 2½ to 3 cents a pound.

Chromates were probably first made in Baltimore, though as early as 1816 a Mr. Wesener, a German chemist, had established himself in Philadelphia, in the neighborhood of Broad and Cherry streets, where he made chrome salts and chrome pigments in considerable quantities. Being nearer the source of supply of the raw material, the Baltimore manufacturers had a decided advantage, so much so that before the middle of the last century the business had drifted back to that city.

Among the other manufacturers of chrome salts in Baltimore were Isaac Tyson & Son and William Davidson & Co. This latter firm also made ferrocyanide salts and probably other heavy chemicals.

Ferrocyanide Operations

The manufacture of ferrocyanides was also carried on quite extensively in Philadelphia, and it may be interesting to note, in this connection, that it was in the manufacture of ferrocyanide of potash that the first attempts were made to utilize atmospheric nitrogen by combining it with carbon at very high temperatures. The manufacture of ferrocyanides was, at a later period, gone into quite extensively at Cincinnati, Ohio, where the large port packing establishments insured an ample and cheap supply of organic materials necessary in its manufacture. About 1850, one firm alone in Cincinnati produced annually upward of 60,000 pounds of prussiate of potash.

The manufacture of bromine, as a by-product in the production of salt, was commenced at the salt springs near Pittsburgh about 1845, and soon assumed enormous proportions.

Soda salts, particularly soda ash, sodium carbonate and also sodium bicarbonate (the latter first known as soda saleratus and later as baking soda), have developed into an enormous and highly specialized branch of chemical manufactures.

Among the first in this country to manufacture soda ash on a large scale was the Pennsylvania Salt Manufacturing Company, at Tarentum, near Pittsburgh. This company, although it has probably developed along different lines from what was at first anticipated, has amply verified a prophecy, made more than fifty years ago, that it would become one of the largest chemical works in the Union.

Sodium Bicarbonate Market

John Dwight and Austin Church began the manufacture of soda saleratus about 1846. They were eminently successful and practically controlled the American market for sodium bicarbonate for a number of years. The rapid development in the manufacture of this particular product is well illustrated by a comparison of prices. In 1820, what was then called supercarbonate of soda, was listed and sold regularly for $1.25 per pound, while in 1850 the same amount could be had, in regular trade, for 4 cents.

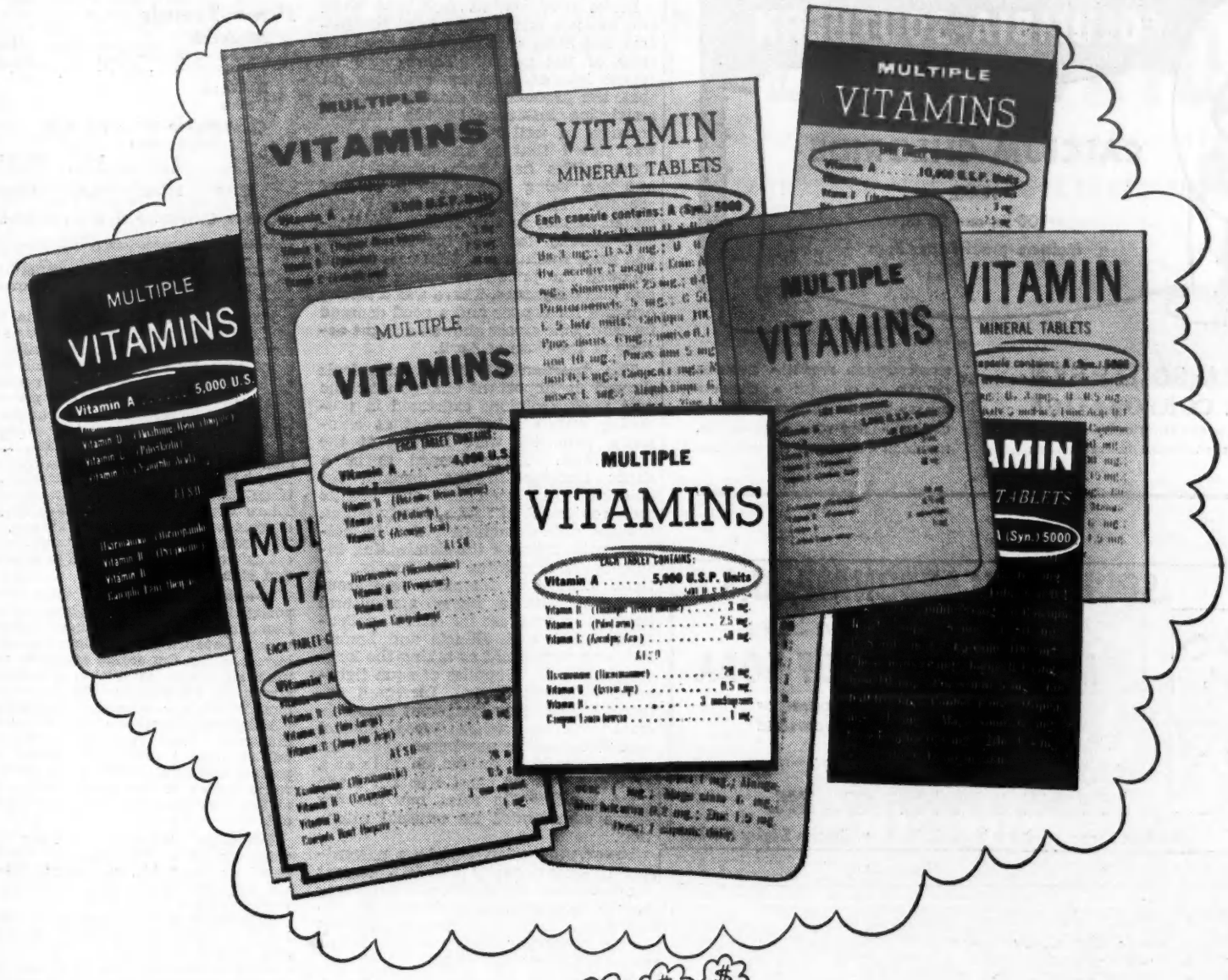
Previous to 1850, and for some time after that, Philadelphia was the acknowledged center for the manufacture of chemicals for medicinal use. One of the first to engage in this branch of chemical manufactures was Dr. Adam Seybert, a graduate of the medical department of the University of Pennsylvania, class of 1873. He was also one of the more prominent members of the Philadelphia Chemical Society. This society, as is well known, took an active part in the development of the mineral resources of the United States.

First Mercurials

In 1801, Dr. Seybert established a chemical laboratory at No. 168 North Second street, where he is said to have made the first mercurials made in this country.

The first to follow him in this line was John Shinn, jr., who, about 1810, established a laboratory at No. 282 North Third street for the manufacture of calomel, corrosive sublimate and a number of other

—Continued on page 39



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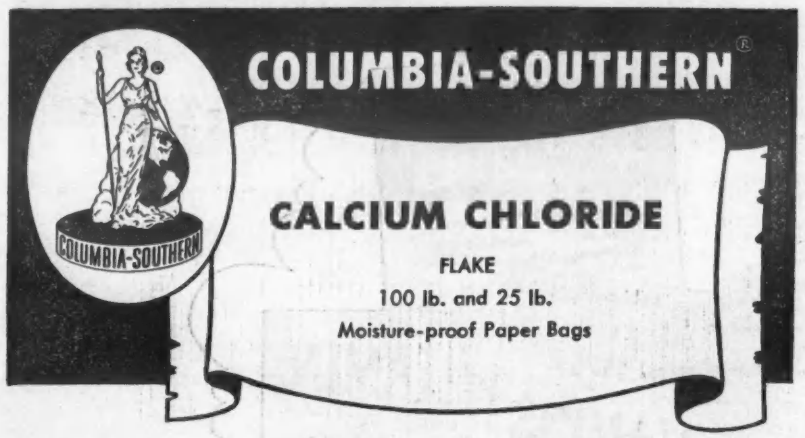

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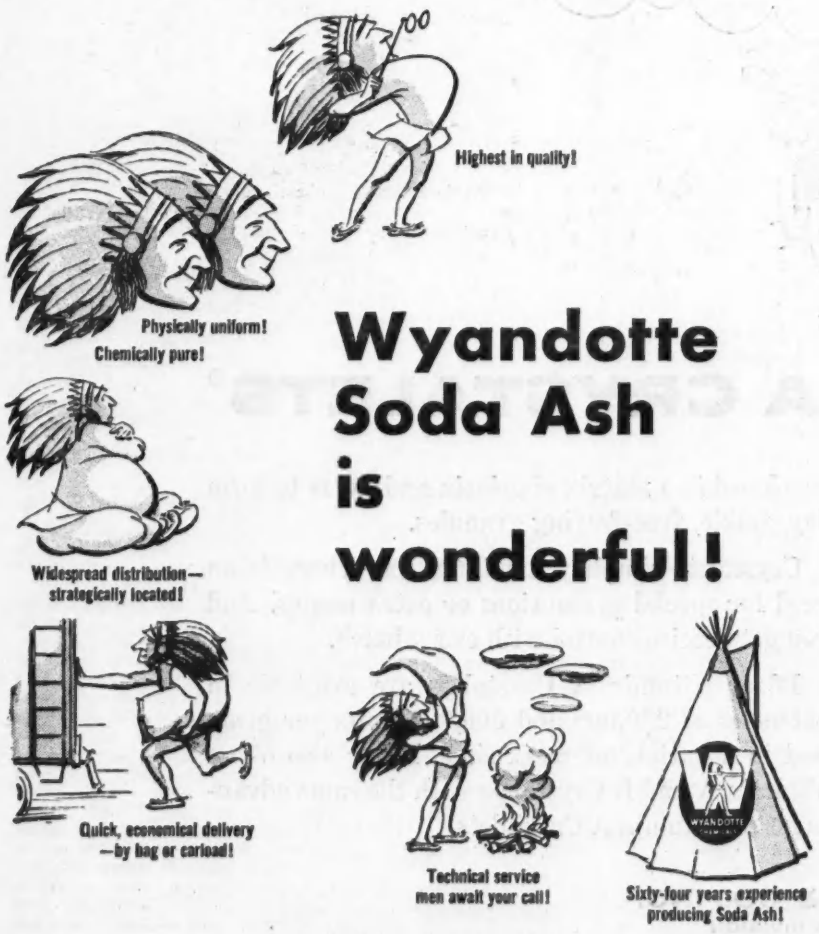
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Heavy Chemicals

Index remained at 98.39 last week and has not varied since April 26. Mercury and Straits tin were higher at the close of the period. There were no round lots of mercury available on spot, the pronounced scarcity having a restricting influence on the market's activity. In well informed quarters it was stated that it looked as though some sellers had been caught short and are being treated to a sort of squeeze. The short interest was estimated at 1500 to 2000 flasks. No unusual activity featured the tin market and price fluctuations were narrow and followed the price movements in London and Singapore. There was a strong demand for copper and a good demand for lead. Zinc stocks showed a slight decline at the close of April.

The position of heavy chemicals showed no important change over the past week. Opinions expressed in producing quarters indicated that shipments generally were holding at the April level. There seemed to be a slight increase in the demand for chlorine while soda ash and caustic soda continued to find a steady outlet. Caustic soda remained about in balance with chlorine the dominating influence in regulating the supply. A tight condition featured anhydrous ammonia with a heavy agricultural demand in progress for direct application. Mississippi, Illinois and Louisiana were mentioned as taking the largest shipments. Supplies of aqua tightened with anhydrous. Increased demand for highway treatment kept calcium chloride active Weed control formulators have purchased about the same tonnage of sodium chlorate as a year ago. Liquid caustic potash made some headway in sales but the dry forms commanded no unusual attention.

Paper production based on percentage six-day capacity was 94.6 percent for the week ending May 8, according to the American Paper and Pulp Association. This compared with 90.9R in the preceding week and 94.6 in the corresponding week of 1953.

Production and supply figures appearing below, unless otherwise designated, are from the Bureau of the Census, Department of Commerce.

Ammonical Liquor — March production was placed at 3,538,074 pounds by the Bureau of Mines. The February total amounted to 3,035,913 pounds, and in March last year 4,361,052 pounds were made. Output for the first quarter of 1954 was 10,714,186 pounds, compared with 12,458,555 pounds for the corresponding period in 1954. Sales in March showed 2,694,553 pounds, against 2,555,218 in the preceding month and 4,059,187 pounds in March last year. Total sales over the first quarter were 8,257,843 pounds, compared with 11,137,913 for the same time in 1954. Stocks on March 31 were 1,693,008 pounds, against 1,825,817 on February 28 and 2,055,687 pounds on March 31 in 1953.

Ammonia, Anhydrous—Remained seasonally tight with agricultural demand strong. It was pointed out that demand may hold into July on account of the late planting season. Aqua ammonia supplies have also tightened under the influence of anhydrous.

Calcium Chloride—Activity continued to gain last week and leaned toward further expansion at the close. The buying movement is principally for highway dust control. Producers have been able to level off requirements to date without difficulty.

Chlorine—Stocks continued long in some quarters where electrolytic caustic soda is made but not so long in others. Buying interest appeared to gain slightly last week but not sufficiently to absorb production readily. The inability to store this material remained a problem.

Copper Sulfate—After showing some improvement early in the month, the agricultural demand turned spotty and was inclined to drag last week. Industrial shipments maintained a good average and have shown no important variation over the past few weeks. Export inquiry has increased particularly from South American countries with the exception of Argentine. Brazil was mentioned as one of the active buyers. The tone of the market remained firm for most grades with a new producer a competing factor in the export trade. The supply has been kept adequate to meet requirements.

Production of copper sulfate in March at 6,656 tons rose 29 percent over February and was at the highest monthly rate since May, 1953, according to the Bureau of Mines. Shipments rose 10 percent to 5,664 tons but were less than production and stocks increased 16 percent to 7,168 tons. At the March rate of shipments, stocks were sufficient for little over a month's needs. A new plant at Baltimore, Md., began to produce in March. Foreign trade data for March are not available. There were no imports in February and exports of 2,853 tons in February were 29 percent less than in January. The largest shipments were destined to Guatemala and Honduras.

Potash, Caustic—Liquid sales were reported to have gained slightly last week. Demand was of miscellaneous character with the soap trade mentioned among the buyers. The dry forms attracted no unusual attention. Potassium carbonate was also a bit more active due to replenishment of stocks at several glass plants.

Potassium Chlorate—Sales of moderate dimensions were reported at full prices but the market was devoid of new or important features. Demand for use in fireworks which in past years, was a factor at this time seems to have about petered out.

Potassium Stannate — Former prices were sustained last week and were still based on tin at 94c. per pound. Demand was reported good with small lot sales predominating.

Salt Cake—Kraft paper mills are calling for regular shipments of this material and producers inventories have not increased much over the first half of the month. February production was placed at 58,702 tons of commercial crude, compared with 57,668 in the preceding month and 57,618 tons in February 1953. Stocks at producing plants on February 28 were 35,302 tons, against 34,811 on January 31.

Soda Ash—Shipments of light and dense ash held about steady over the past week. The market remained in adequate supply although producers stated that stocks are not excessive. Output has been adjusted to maintain a fair degree of balance.

Soda, Caustic—Producers continued to report a steady demand for dry and liquid forms of caustic. Production has been kept down in an attempt to keep the supply of chlorine from increasing. In one major producing quarter it was stated that chlorine at present is the regulating factor in the supply of caustic soda.

Sodium Bicarbonate — Demand described as moderate to fair without showing much variation up or down. Production of refined in February amounted to 8,446 tons, compared with 8,404 in the preceding month and 9,388 tons in February last year. Stocks at the close of February were 3,183 tons, against 3,177 on January 31. Shipments and interplant transfers during February 1954 showed 7,783 tons, compared with 7,579 in the previous month.

Sodium Chlorate—Demand for weed control formulations has featured the market since the turn of the month and it was stated that the volume of business placed is about the same as in 1953. Production during February was placed at 2,773 tons, compared with 2,783 in the preceding month and 3,291 tons in February 1953. Stocks at producing plants were not available.

Sodium Phosphates—February production of meta amounted to 4,507 tons, compared with 4,750 in the previous month and 3,988 tons in February last year. Stocks at producing plants on February 28 were 1,756 tons against 1,572 on January 31. Tetra output showed 8,045 tons in February, compared with 7,484 in January and 8,248 tons in February 1953. Stocks on February 28 were 2,196 tons, compared with 1,884 tons on January 31. Acid pyro production in February was 1,597 tons, against 797 in the preceding

For Late Market Developments, See Page 4

Price Trends

Advanced

Mercury, $13 per flask.
Tin, Straits, 1c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 15, 1953
98.39	98.39	98.41	97.27

(*For Current Prices see page 9*)

month and 1,034 tons in February last year. Stocks on February 28 were 1,062 tons, compared with 867 tons at the close of January. Tripoly output amounted to 39,876 tons in February, against 41,524 in January and 36,634 tons in February last year. Stocks on February 28 were 8,166 tons compared with 7,377 tons on January 31.

Acids

Chromic—Prices held steady under fair demand which represents mostly small lot sales for prompt shipment. Supplies have been kept adequate to meet requirements. February production was placed at 928 tons, compared with 1,149 in January. Stocks at producing plants on February 28 were 1,068 tons, compared with 1,138 on January 31.

Hydrofluoric—Supply and demand not far out of balance at present. Demand described as good. February showed production of anhydrous and technical at 3,973 tons, compared with 4,862 in the preceding month and 4,156 tons in February, 1953. Stocks at producing plants on February 28 amounted to 2,427 tons, against 2,214 on January 31.

Phosphoric—Sales holding seasonal dimensions with prices unchanged and steady. Production during February amounted to 235,268 tons including 106,448 tons made from phosphorus and 128,820 made from phosphate rock. The January total was revised to 248,638 tons and in February last year 199,765 tons were produced. Stocks at producing plants on February 28 were 24,668 tons, compared with a revised total of 30,079 on January 31.

Sulfuric—Supply has topped demand in some producing quarters particularly where the iron and steel industry has been serviced. In other directoins the market has not been far out of balance. Supply conditions remain comfortable and no price changes have taken place.

Nonferrous Metals

Aluminum — March production was placed at 244,678,349 pounds by the Aluminum Association. This total compares with 220,965,786 pounds in February and 208,919,425 pounds in March, 1953. The largest production in the March total was sheet and plate involving 82,484,563 pounds, castings were next with 25,928,710 pounds followed by extended products at 21,701,743 pounds. The foil production amounted to 11,838,601 pounds and rod and bar showed 10,137,207 pounds.

Copper—Buying interest continued active with producers handling most of the May business which was estimated around 60,000 tons to date. June shipment commanded some attention although sales so far have not been of extensive dimensions. Domestic electrolytic remained firm at 30c. per pound delivered Valley basis.

Lead—Consumer demand was described as good last week. Sales were mostly for prompt shipment and represented the replenishment of inventories. The price remained steady at 13.80c. per pound St. Louis and 14c. New York for the common grade.

Mine production of recoverable lead in the United States during the first quarter of this year declined to 81,288 tons from 91,407 tons in the corresponding period of last year, according to the Bureau of Mines. Output in March increased to 29,150 tons from 27,443 tons in the short month of February. Output from states east of the Mississippi rose 15 percent in March to 785 tons, the Bureau said. Production from the West Central states (Missouri, Oklahoma, Kansas) was up 10 percent to 12,835 tons owing largely to a substantial gain from Southeastern Missouri. A slight increase was recorded in output from Western states, which totaled 15,530 tons.

Manganese—Supplementary Indian export quotas for iron and manganese ores for shipment from the port of Calcutta will be released by the Government of India, according to a press statement issued on April 3. Applications for additional export licenses will be considered only from shippers and mine owners who have completed shipments against previous allotments and who do not require transportation facilities for additional quantities.

Mercury—Again new high prices were recorded for spot material last week with the available supply drained almost to the exhaustive point. No round lots were offered and a few scattered sales of 25 flasks each constituted most of the week's activity. At the close prices ranged from $250 to $253 per flask on spot.

Tin—No unusual activity in the domestic tin market last week. The price movement of Straits tin was relatively narrow ranging mostly from 93c. to 94c. per pound for spot and nearby futures ¼c. to ½c. below these figures. In the late trading 94c. was the prevailing price.

Zinc — American Zinc Institute placed stocks of all grades of slab zinc at 201,100 tons on April 1. Production during April showed 70,233 tons, domestic shipments amounted to 67,059 tons, export and drawback 977 tons, government account 2,489 tons, making total shipments for the month 70,525 tons and leaving stocks on April 30 at 200,808 tons. The supply at the close of March was revised to 201,100 tons. Unfilled orders at the end of April were 31,702 tons, compared with 37,209 on March 31. Daily average production was 2,341 tons, against 2,296 in March and 2,661 tons over 1953. Production of prime western during April amounted to 36,056 tons compared with 36,199 in the previous month. Stocks on April 30 were 99,603 tons, against 99,109 on March 31.

Foxboro to Build Branch in Calif.

Ground has been broken for a new branch factory to be erected in San Leandro, Calif., by Foxboro Company, Foxboro, Mass. Scheduled for completion by August 15, the 8400-square-foot building will more than double the production area of the present San Francisco shop.

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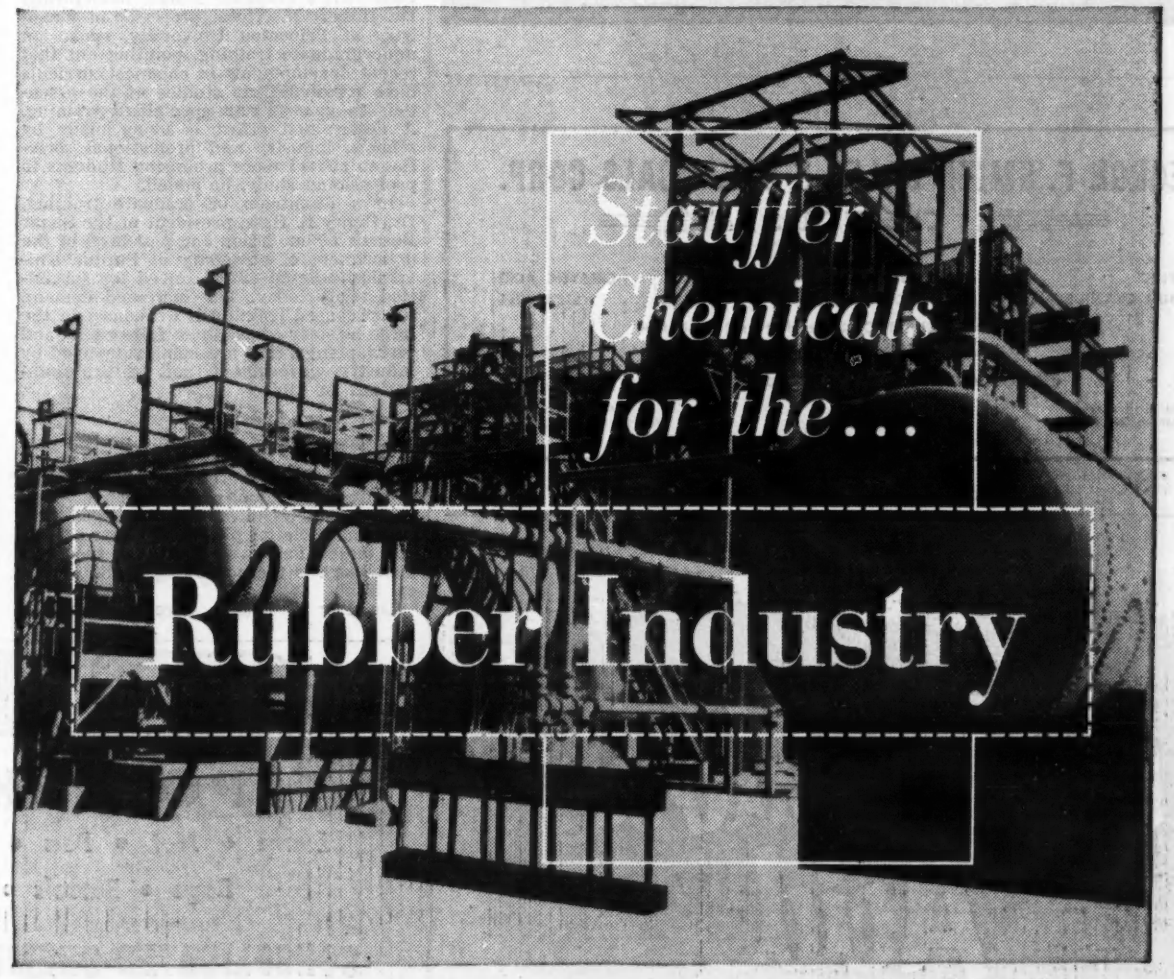

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AIC Installs Keyes; Dinsmore President-Elect

—Continued from page 5

research in physical chemistry, Mellon Institute, Pittsburgh, Pa.

A model employment contract for chemists was presented by an employer-employee relations committee, headed by Dr. George L. Royer administrative assistant to the general manager of the research division of American Cyanamid Company at Bound Brook, N. J.

In the proposed contract some new points of view were brought out relative to the responsibilities of both the chemist and his employer in the making of a contract agreement. Besides the usual agreements regarding patent assignments and salary benefits, the contract brought in some covenants on termination rights and practices after termination. An amount of termination pay related to years of service was presented, and a daily compensation fee for patent consultation after termination was suggested. In addition, certain items relative to scientific meeting attendance and publication rights were included.

Panel on Education

A panel discussion on "Education for the Chemical Profession" was held with Dr. Harvey A. Neville, dean of Lehigh University's graduate school, moderating. Dr. Hubert N. Alyea, professor of chemistry at Princeton University, spoke on undergraduate training, pointing out that recent developments in chemical curricula have resulted from studies of the essentials to general and specialized training. A determined effort is being made by schools, industry and professional societies to attract more promising students to professional study, he added.

In a discussion of graduate training, Dr. Henry B. Hass, president of the Sugar Research Foundation and past head of the department of chemistry at Purdue University, pointed out the need for specialized study today. The increased demand for advanced training is evidenced in the large number of graduate fellowships and assistantships that are being supported by industry, government, and private foundations, he said.

'Study Never Ends'

"Study never ends for the professional chemist," Dr. Thomas H. Vaughn, vice-president for research and development of Colgate-Palmolive Company, said, adding that technical literature and professional societies play the largest part in the dissemination of advanced technical knowledge to those working in the chemical field.

Dr. Per K. Frolich, vice-president for scientific activities at Merck & Co., concluded the panel on the part of the chemical industry in the field of education. He placed special emphasis on what the chemical industry is doing and can do in the assistance of teachers and students through summer employment, plant visits, teaching aids and other forms of assistance.

Miss Kimball Honored

Miss Vera Kimball was honored for twenty-five years' service with the national office of the AIC. This is Miss Kimball's twentieth year as editor of The Chemist and Dr. Work presented her with a framed life membership certificate at the close of the annual business meeting.

The AIC engaged Miss Kimball in 1929 as an assistant to the editor and to the secretary. She was made editor of The Chemist in 1935. Miss Florence Wall, editor of the publication from 1929 until 1932, and the only woman on the national council of the institute, presented Miss Kimball with a specially engraved silver tray on behalf of the council.

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Chemical Progress Report: 1904

—Continued from page 34

chemicals for medicinal and technical uses.

About the same time (1810) Innes & Robertson established a laboratory in Elizabethtown, N. J., where they made aqua ammonia, sulphuric ether, benzoic acid, and some time later, added a full line of mercurials and other medicinal chemicals.

About 1811, Dr. Gerard Troost, who has been mentioned before in this sketch, in company with his brother, Benoit Troost, began the manufacture of a variety of chemicals for medicinal use in a laboratory on Coates street (now Fairmount avenue), in this city.

The Wetherills were also manufacturers of a line chemicals in their extensive laboratory at the corner of Twelfth and Cherry streets.

Farr & Kunzi and Successors

Farr and Kunzi began the manufacture of chemicals about 1818. Abraham Kunzi, a Swiss by birth, retired in 1938, and the senior partner, John Farr, who had been born and brought up in England, associated with himself Thomas H. Powers and William Weightman, two young Philadelphians, who had been in the employ of the firm for some time. The new firm name was John Farr & Co. This was later changed to Farr, Powers & Weightman, and on the death of the senior partner in 1841, the firm name was again changed; this time to the the still existing title—Powers & Weightman. This firm, for a number of years, was considered to be one of the largest general chemical manufacturing concerns in the United States, and it still holds an enviable reputation for the quality and reliability of its manufactures.

George D. Rosengarten and Charles Zeitler, as Rosengarten & Zeitler, began the manufacture of chemicals in St. John street, Philadelphia, about 1822. They were among the first to manufacture the alkaloids of cinchona and opium in this country. Zeitler, while admittedly a very able chemist, appears to have been rather eccentric in his ways. He withdrew from the firm about a year later and Mr. Rosengarten continued the business alone until 1834, when he associated with him N. F. Dennis, a French chemist of considerable ability. The firm continued as Rosengarten & Dennis until 1855, when the junior withdrew and the firm name was changed to its present style, Rosengarten & Sons, the laboratory, about the same time, being removed to its present location at Seventeenth and Fitzwater streets. There were, of course, a number of other manufacturers of medicinal chemicals, but the majority of them have long since specialized into one or two particular lines or have discontinued business. One of the latter, Charles Ellis & Co., were at one time extensive manufacturers of chemicals. They were the successors of Christopher Marshall, who, in turn, was probably the first druggist, with any appreciable amount of chemical training, to settle in America.

Development of Technical Education

Any historic account of the development of the chemical industries in America would be incomplete without at least some reference to the rise and development of the teaching of the technical side of chemistry.

The first systematic attempt to teach the principles of chemistry was made in 1765 in connection with the medical department of the, then, College of Philadelphia. The first teacher of this branch of science was John Morgan, the founder of the Medical School.

No separate chair of chemistry was instituted until 1769, when Benjamin Rush was appointed professor of chemistry in the same school.

The first school to institute a chair of chemistry as part of a collegiate education was the College of New Jersey, now Princeton, where John McLean taught chemistry some years before the beginning of the nineteenth century.

Popular lectures on chemical subjects were given in Philadelphia as early as 1807, when Dr. Joseph Parrish, then quite a young man, commenced a series of public lectures on chemical subjects. To Dr. Parrish must be given the credit of establishing a system of instruction, by means of popular scientific lectures, that has done much to keep the citizens of Philadelphia in touch with modern progress.

Probably the first institution to take up and elaborate on this idea of popular instruction was the Franklin Institute. This institute, from its foundation, has always adhered to the practice of given popular scientific lectures. The first course of these lectures was given in the old Academy Building, the original home of the College of Philadelphia, and later in Carpenter's Hall, where also was held the first exhibition ever given under the auspices of the Institute. On the completion of its own building, the lectures were given in its own, now venerable, hall.—*Journal Franklin Institute.*

U. S. Rubber Development, Research Director Retires

Dr. Willis A. Gibbons, associate director of research and development, has retired from United States Rubber Company, New York, after more than forty-one years of service. Dr. Gibbons joined the company in 1912. His major developments include latex dipping of tire cord, a new test for vulcanization, a new method of vulcanization, and the manufacture of rubber thread and other products directly from latex.

Dr. Gibbons was named director of research in 1928 and until 1946 directed the company's research in the fields of rubber, rubber chemicals, textiles, plastics and synthetic rubber. He had been associate director of research and development since 1946.

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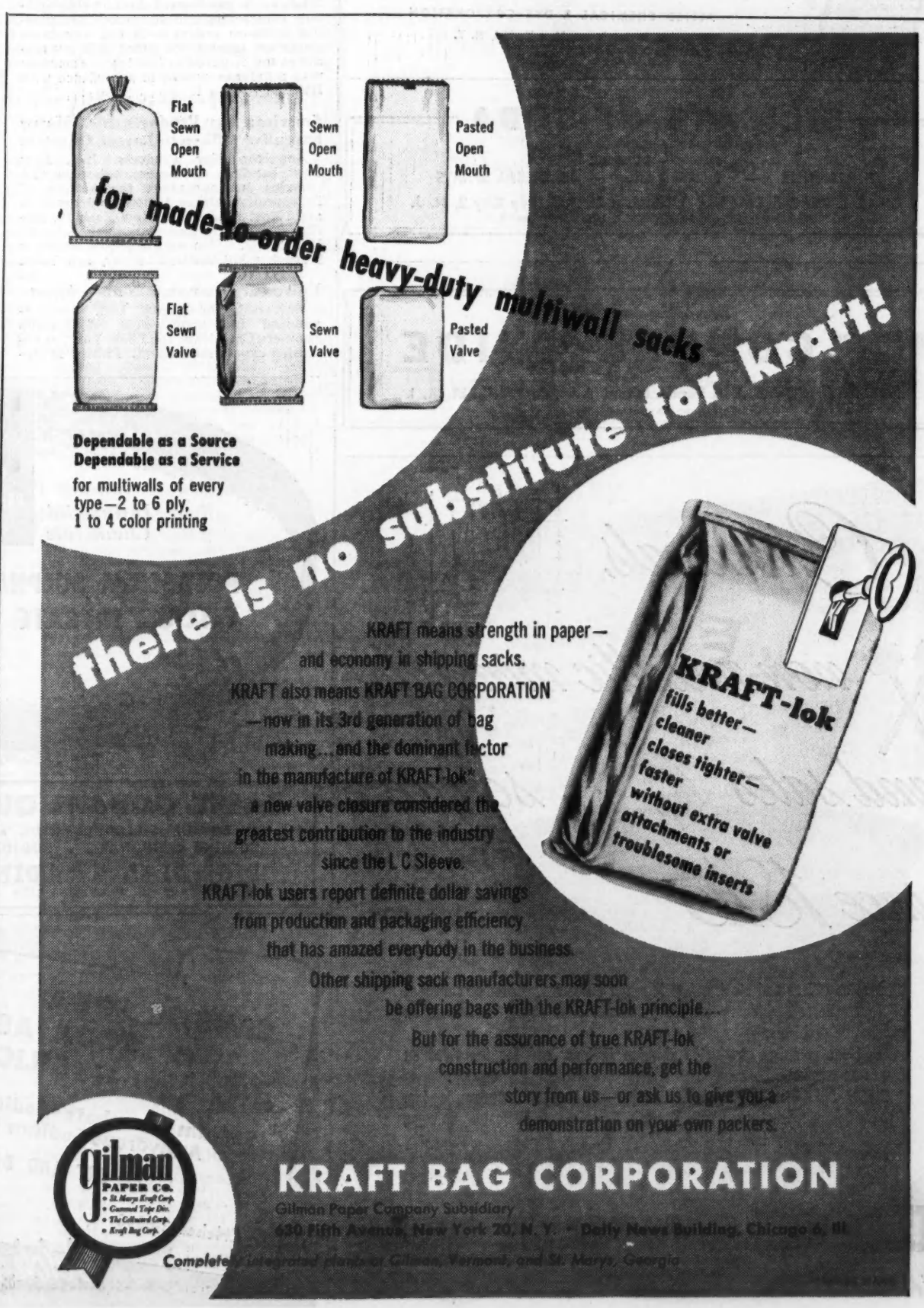
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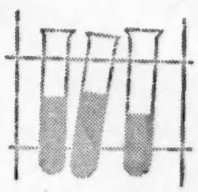

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Aluminum Set-Aside Told For 3rd Quarter by BDSA

The Business and Defense Services Administration has announced that 134,000,000 pounds of aluminum will be set aside from the total supply available in the third quarter of 1954 to fill Department of Defense and Atomic Energy Commission orders. The reserve includes the quantities necesary for Department of Defense and Atomic Energy Commission requirements, defense related "B" products, foil, and ingot for powder.

This reserve is 32,000,000 pounds less than the amount set aside for similar orders in the second quarter of 1954. BDSA officials said the reduction reflects a decrease in military requirements. The third quarter figure represents 15 percent of the anticipated supply of domestic and imported primary aluminum for that period. Second quarter 1954 set-asides were 19 percent of available supply.

Under the Defense Materials System, that portion of the aluminum supply available to the United States above the quantity set aside for defense and atomic energy requirements and the national stockpile is free for civilian consumption without government restriction. BDSA officials again emphasized the fact that military contractors and subcontractors placing purchase orders with the aluminum producers against the above military set-asides are required to identify such orders with a defense symbol in accordance with DMS regulation 1.

American Key Products, Inc., Moves Executive Offices to Larger Quarters

American Key Products, Inc., New York, handlers of starches, adhesives and dextrins, has announced the removal of its executive offices to enlarged quarters at 12 East 42nd street, New York 17. The firm's new telephone number is MUrray Hill 2-1272. The company was formerly located at 270 Madison avenue, New York.

Universal Detergents Names Agent

Universal Detergents, Inc., has announced the appointment of Philipp Brothers Chemicals, Inc., New York, as exclusive export sales agent. Philipp Brothers will handle distribution of "UDET F" surfactants and agricultural chemicals in all countries outside the United States. In addition, it will continue distributorship of "UDET F" products in the eastern United States.

Silica Gel of Low Density Offered by Davison Chemical

A silica gel of extremely low density, with a wide range of applications has been introduced by Davison Chemical Corporation, Baltimore, Md., as "Syloid 244." A free-flowing white powder, the new product appears as a fluffy snow since it weighs only 4.5 pounds per cubic foot as shipped. When mixed in vehicles it becomes transparent and remains in suspension indefinitely in most organic solvents, it was stated. Although having an apparent particle size of 2-3 microns, individual particles of "Syloid 244" are predominantly below one micron.

Because of its extensive internal porosity and low particle size it has an oil absorption capacity of 240 pounds per 100 pounds of silicon dioxide, according to company reports. Uses that have been suggested by the makers are for anti-blocking of clear plastic film; as an additive to inks of various types; for vinyl flattening; as a cosmetic ingredient; for anti-caking and for thickening of a variety of fluids, such as pharmaceutical preparations and plastics.

Hatco Chemical Appoints

John Conway has joined Hatco Chemical Company, Fords, N. J., as sales manager. Mr. Conway will be responsible for all sales and development activities. He comes to Matco after eighteen years with Carbide & Carbon Chemicals Company, a division of Union Carbide & Carbon Corporation.

Trade Briefs

Emolsol Corporation, Chicago, has issued technical bulletin No. 41 describing its toxicant emulsifier, "Emcol H-85A."

Lummus Company, New York, has issued a booklet on its heat exchanger division.

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ACS Recommends Support Of Appley Report Proposals

President Eisenhower was urged by the American Chemical Society, in a letter made public last week, to use his authority to speed a fundamental reorganization of the nation's military reserves, recommended by the report entitled "Manpower Resources for National Security," which was prepared for the Office of Defense Mobilization by its committee on resources for national security under the chairmanship of Lawrence A. Appley.

The letter, signed by Alden H. Emery, executive secretary, expressed the society's unqualified approval in principle of the Appley report proposals and declared that "rumors as to the attitudes of certain groups" toward plans for putting the proposals into effect are "disturbing."

As Sherman Adams, assistant to the president, pointed out in a reply to Mr. Emery which was made public at the same time, on the basis of the Appley report the President directed ODM and the Department of Defense "to develop detailed plans for improving the organization and training of the reserve forces, and measures whereby members of the reserve may be called to active duty with the least necessary disruption of essential civilian activities." These plans are to be submitted to the National Security Council this month.

Gelling Agent Development Told by National Lead Co.

National Lead Company, New York, has announced a new product, said to be useful as a selling agent for all types of aqueous systems. Sold under the tradename "BEN-A-GEL," it is a highly beneficiated hydrous magnesium silicate of milky-white color and is used to thicken water solutions or emulsions such as lotions, creams and other cosmetic preparations. It has many other applications where permanent thickening or suspension is required such as cleaning compounds, polishes, agricultural sprays, textile finishers, adhesives and water emulsion paints, National Lead said.

The gelling action of "BEN-A-GEL" requires 1 percent to 5 percent, based on the water content and is unaffected by heat or aging. Permanent gelling is obtained by mixing "BEN-A-GEL" in the water system by high speed stirring for a few moments.

Int'l Minerals Research Post Goes to Dr. Gillis

Dr. M. B. Gillis has been made manager of research in organic and biological sciences of the research division of International Minerals & Chemical Corporation, Chicago. Dr. Gillis takes over his new responsibilities from Dr. M. J. Blish who retires at the end of June. From now until his retirement, Dr. Blish will engage in special assignments for International. Since 1951 Dr. Gillis has been in charge of nutrition research at International's general research laboratory at Skokie, Ill.

Cyanamid Appoints Pullman

Appointment of Dr. J. C. Pullman as assistant to the manager of the new product development department has been announced by American Cyanamid Company, New York. Dr. Pullman, who joined the department in 1952, has been engaged in the introduction of new products to the chemical industry. Earlier he was concerned with the development of chemicals for the paper converting industry at Cyanamid's Stamford, Conn., research laboratories.

Water Pollution Control Board Adds Powers as Industry Representative

Thomas J. Powers, supervisor of waste disposal for Dow Chemical Company, Midland, Mich., has been appointed by President Eisenhower as industry representative on the water pollution control advisory board of the Public Health Service. The board serves in an advisory capacity to the surgeon-general on policies and programs of the Public Health Service under the pollution control act.

Aluminum Research Booklet Offered

Aluminum Company of America, Pittsburgh, Pa., has published a fifty-four page booklet entitled, "Research at Alcoa." In addition to a description of the work of Alcoa's research laboratories, the booklet provides a bibliography of more than 1,000 books, technical papers and articles about aluminum. Copies may be obtained from Alcoa's sales offices or from the main office at 726 Alcoa building, Pittsburgh 19.

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Cyanamid Research Staff Joined by Fuels Expert

Dr. Henry H. Storch, formerly chief of the synthetic fuels branch of the Bureau of Mines, has joined the staff of the Stamford, Conn., research laboratories of American Cyanamid Company, New York. He has become a technical assistant to the director of the laboratories and will provide technical aid to the laboratories and other branches of the research division of the company, especially in the field of coal and gas technology, and of catalysis.

Dr. Storch joined the Bureau of Mines in 1928, and in 1930 became chief physical chemist at its Pittsburgh, Pa., laboratories. Since that time he has been concerned with many scientific and administrative phases of the bureau's work on synthetic fuels.

Chemical Officer Confirmed

The senate last week confirmed the nomination of Brig. Gen. William M. Creasy to be chief chemical officer of the United States army with the rank of major general. Gen Creasy has assumed his new duties succeeding Maj. Gen. E. F. Bullene, who had been chief for the past three years.

Air Pollution Abatement Manual Offered by Manufacturing Chemists

The Manufacturing Chemists' Association has published its complete "Air Pollution Abatement Manual," including a recently completed chapter on "Terminology and Selected Data" by Willard W. Hodge, senior fellow of the Mellon Institute of Industrial Research. Other chapters, plus a preface and an outline of the manual, have previously been published as separate prints.

The entire manual has been prepared to assist industry and government personnel in achieving abatement of air pollution by the most effective means and at the lowest ultimate cost. It includes information on the types of air pollution, legislative requirements, technical methods of handling problems, and suggestions for enlisting the cooperation of employees, industry and public officials, and the public itself.

On request, single complimentary copies of the full thirteen-chapter manual will be supplied to federal, state and municipal officials directly charged with air pollution control responsibilities. For others the price, which represents the cost to the association, is $6 each with binder included. Chapter II, which has just been issued, is priced at 75 cents per copy.

Pitts. Plate Appoints Post To Head West Coast Unit

Herschel E. Post has been appointed general manager of the Pacific coast paint division of Pittsburgh Plate Glass Company. Mr. Post joined Pittsburgh Plate in 1930 as manager of the Sacramento, Calif., store after operating his own paint business there for nine years. In 1932 he was named sales manager for the Oakland, Calif., district and eight years later was appointed factory manager of the Houston, Tex., paint division. Since 1942 he has been general sales manager for industrial finishes at the company's general offices in Pittsburgh, Pa. Mr. Post will make his headquarters at Torrance, Calif.

Trade Briefs

Joseph A. Martino, president of National Lead Company, New York, has been appointed chairman of the metals division of the Committee of American Industry.

Pennsylvania Salt Manufacturing Company has named Alfred H. Pope product supervisor for its metal cleaners and has appointed William T. West to Mr. Pope's former position on the technical department staff.

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Agricultural Chemicals

Shadows of the end of the active season for several of the basic fertilizer chemicals were reflected in the markets last week. Production of ammonium sulfate is temporarily sold out and no sizable quantities were available for immediate shipment. It was stated that some foreign material was still held in storage at southeastern port warehouses. Sellers, however, admitted by the end of the month, demand would relax. Contract withdrawals of potassium muriate held steady over the first half of May but here also demand is expected to taper off by the turn of the month. Normal superphosphate found a moderate to fair demand, shipments being partially stimulated by the continued scarcity of triple. At the beginning of the season, many buyers hesitated about taking on triple under the supposition that new production would create an easy supply. While part of the increased output met expectations the major part did not and demand has not been leveled off. About the same condition exists in ammonium nitrate also. Nitrogen solutions and ammonium, dolomite and nitrogen compounds have found a steady market and probably will close the season about in balance. Anhydrous ammonia held a relatively tight position but buyers have not been treated to a "squeeze" such as developed at intervals last year.

No price changes in packing-house byproducts were recorded over the past week. There was some slowing down in stockfeed demand and several trade interests were of the opinion that prices had reached their top, temporarily at least.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 15, 1953
112.97	112.97	112.92	111.56

(*For Current Prices see page 9*)

Fertilizer Materials

Ammonium Sulfate—March production of coke-oven sulfate increased 6.8 percent over the preceding month, according to the Bureau of Mines. The totals showed 142,926,392 pounds, compared with 133,869,544 in February and 163,448,276 pounds in March, 1953. Production for the first quarter of 1954 was 427,094,221 pounds, against 472,958,206 for the corresponding period last year. Sales in March were 278,439,184 pounds, compared with 169,099,836 for the preceding month and 203,792,786 pounds in March last year. Total sales for the first quarter were 588,664,805 pounds, against 504,395,589 for the same time in 1953. Stocks on March 31 amounted to 145,084,439 pounds compared with 281,513,198 on February 28 and 48,692,066 pounds on March 31, 1954.

Producers are moving ammonium sulfate steadily and output for prompt shipment appeared to be fully under contract. There are no inventories hanging over the market and, aside from some foreign material stored in the southeast, the market supply is well cleaned out temporarily. The movement is expected to hold for about two weeks more when the activity will likely taper off.

Bone Meal—Market held at $62 per ton, works, for domestic steamed although activity subsided appreciably. Some sellers were of the opinion that top prices had been reached temporarily at least.

Dried Blood—Trading quiet both here and in the midwest. Sellers maintained former views naming $8.50 per unit of ammonia New York and $9 at Chicago.

Fish Meal — Menhaden quiet, with scarcity of spot material restricting sales and buyers apparently willing to await new production developments. Sales being conducted on a when and if basis at price time of shipment.

Phosphate Rock—Domestic demand reported slower, with some increase in available stocks. Shipments against export contracts were said to be about normal for this period of the year, but no new sales of importance were recorded.

Potassium Muriate—Shipments against contracts held about steady over the first half of the month, but are expected to slow down by the end of the period. In one major producing quarter it was stated that inventories have been liquidated and that muriate was being shipped as rapidly as made. Three Carlsbad producers have named the same prices for standard grade muriatic in bulk, as prevailed over the past season. The prices for 1954-55 become effective June 1.

Sodium Nitrate—Shipments have continued to expand regardless of unfavorable weather conditions over the past week. Supply conditions have remained comfortable with prices steady.

Superphosphate—It looked as though domestic seasonal requirements for normal had been mostly leveled off. Unfavorable weather tempered demand in the east and northeastern areas last week and the movement was a bit slower than expected. Stocks have continued adequate to meet demand. Triple held the same tight supply condition recently noted. New production has experienced mechanical difficulties in some instances and the quantity reaching the market has been considerably below the amount anticipated. An export order for 6,000 tons was in the market for triple for shipment to South America. The trade was not confident this order could be filled.

Los Angeles Market

Los Angeles.—Interest in organics, with exception of fish meals, lagged somewhat over the week due to asking prices, and trading was light. South American mixed fish meal and Norwegian herring meal increased with demand steady Call for inorganics continued strong with this situation expected to obtain for another month with present spreading operation schedules. Suppliers were rushed to keep stocks moving in and on schedule and it is expected that users will have sufficient quantities of material during this peak season.

Ruling prices were:—Ammonium nitrate—$53.50 per ton, domestic, f.o.b. Los Angeles. $89.84 per ton, Canadian material, f.o.b. Los Angeles.

Ammonium phosphate—$80.14 per ton in bags, 16/20 grade, f.o.b. Los Angeles. $107.64 per ton in bags, 11/48 grade, f.o.b. Los Angeles. Both Canadian material.

Ammonium sulfate—$55.93 per ton in bags, domestic, f.o.b. Los Angeles. $3 less in bulk. Canadian material same.

Blood meal—$8-$8.25 per unit of ammonia at source. Bone meal—$68-$80 per ton, imported, 1/65 meal, c.i.f., Los Angeles Harbor. Domestic—$90-$92 per ton, f.o.b. Los Angeles.

Calcium nitrate—$48 per ton, 15½ percent nitrogen, c.i.f., Los Angeles Harbor.

Castor pomace—$32-$35 per ton, f.o.b. Los Angeles.

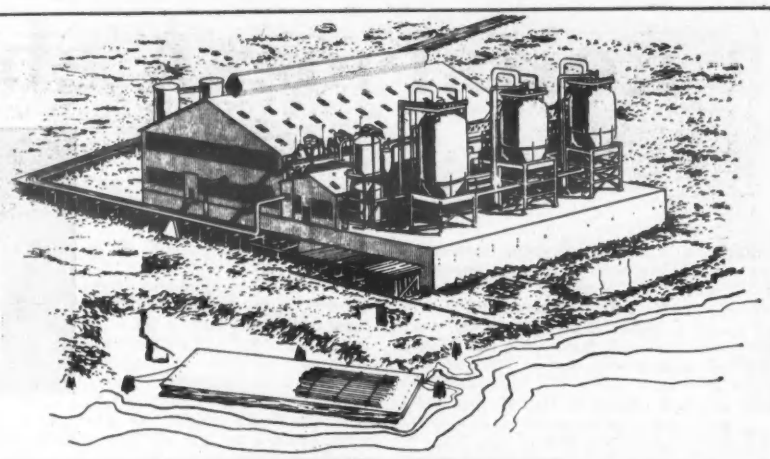
Sodium nitrate—$54.50 per ton in 100-pound bags, f.o.b. Los Angeles. $49.50 per ton in bulk.

Pesticides

Gradual expansion in buying interest by domestic consumers continued last week with prospects favoring a steady gain as the season progresses. Export orders for DDT have drained the major part of producers' inventories and in some instances have put pressure on makers' capacity. The latest procurement order for 6,000 tons of wettable 75 percent powder has been allotted. Most of this material was for India. Part of this order 1,600,000 pounds was accepted at graduating prices from 25.85c. to 27.85c. per pound and other bids were in line with these figures which show an advancing tendency of the market. DDT is in a much stronger position than BHC. The latter has not shown much activity to date for domestic account although the formulations have found a fair export outlet. Demand for the weed and bush control chemicals has increased both for home and export use and the markets while still showing evidence of competition are considerably more stabilized than a year ago. Puerto Rico has been an active buyer of 2,4-D and so have other countries that grow grain, rice and sugarcane.

Examination of 30 trash samples from Lincoln and Poinsett Counties, Arkansas, showed no overwintering boll weevil adults. This is in contrast to 97 adults per acre from fall trash samples. Total of 190 samples from upland areas (Hempstead County) showed average of 127 adults per acre. Fall trash examination in this area yielded 343 weevils per acre. These data indicate a very low early weevil infestation. ALABAMA—Seventy-three samples of trash collected from Dekalb, Lee, Limestone, Marion and Tuscaloosa Counties reveal average of 132 weevils per acre. The 1953 weighted average survival for Autauga, Elmore, Dekalb, and Limestone Counties was 494 weevils per acre, the Department of Agriculture bulletin states.

For Late Market Developments, See Page 4



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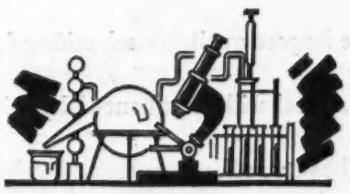

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50% Dust Concentrate
50% Wettable Powder
25% Emulsifiable (2 lb./gal.)

BHC (Benzene Hexachloride)
12% Dust Concentrate
12% Wettable Powder
11% Emulsifiable (1 lb./gal.)

TOXAPHENE
40% Dust Concentrate
40% Wettable Powder
60% Emulsifiable (6 lb./gal.)
74% Emulsifiable (8 lb./gal.)

HEPTACHLOR
25% Dust Concentrate
25% Wettable Powder
15% Emulsifiable (1½ lb./gal.)

CHLORDANE
20% Oil Concentrate, Refined
40% Dust Concentrate
40% Wettable Powder
47% Emulsifiable Concentrate
74% Emulsifiable Concentrate

TECHNICAL
2,4,5-Trichlorophenoxyacetic Acid Technical
Butyl Ester of 2,4-D Technical
Butyl Ester of 245-T Technical
Isopropyl Ester of 2,4-D Technical
Isopropyl Ester of 245-T Technical
Iso-octyl Ester of 2,4-D Technical
Iso-octyl Ester of 245-T Technical

LINDANE
20% Emulsifiable Concentrate (1.4 lb./gal.)
25% Wettable Powder

MALATHION
46% Emulsifiable Concentrate
55% Emulsifiable Concentrate

WEED & BRUSH KILLERS
Butyl Ester 2,4-D Emulsifiable (2.65 lb./gal.)
Butyl Ester 2,4-D Emulsifiable (4 lb./gal.)
Butyl Ester 2,4-D Emulsifiable (6 lb./gal.)
Butyl Ester 2,4-D Non-Emulsifiable Oil Base (6 lb./gal.)
Amine 2,4-D Concentrate (4 lb./gal.)
Amine 2,4-D Concentrate (6 lb./gal.)
Isopropyl Ester, 2,4-D Emulsifiable (3.34 lb./gal.)
Low Volatile 2,4-D Emulsifiable (4 lb./gal.)
Low Volatile 245-T Emulsifiable (4 lb./gal.)
Butyl Ester 245-T Emulsifiable (4 lb./gal.)
2 & 2 2,4-D & 245-T Butyl Ester Emulsifiable
2 & 2 2,4-D & 245-T Low Volatile Emulsifiable
Chloro-I.P.C. Emulsifiable (4 lb./gal.)
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The Toilet Goods Association

19th Annual Convention, New York, May 11-13

John A. Ewald, president of Avon Products, Inc., New York, was elected president of the Toilet Goods Association at its nineteenth annual convention, held May 11 to 13 at the Waldorf-Astoria hotel, New York.

A. E. Johnston of the Colgate-Palmolive Company, Jersey City, N. J., was elected a vice-president of the association, replacing H. J. Lehman of the Wildroot

John A. Ewald
TGA's New President

Company, Buffalo, N. Y., who resigned. Also elected a TGA vice-president was Pierre Harang of Houbigant Sales Corporation, New York. Jean Despres of Coty, Inc., New York, and Charles T. Lipscomb, jr., of Pepsodent Division of Lever Brothers Company, New York, were re-elected vice-presidents.

Philip C. Smith of Yardley of London, Inc., New York, was re-elected treasurer of the association, while William F. Denney, jr., of Frances Denney, New York, was re-named secretary. Three new directors were elected for three-year terms. They were:—

B. L. Emery of Chesebrough Manufacturing Company, New York; William Hunnefield of Jean Nate, Inc., New York, and Northam Warren, jr., of Northam Warren Corporation, New York. Elected to a two-year term on the board of directors was Robert E. Schwartz of the Wildroot Company. Mr. Schwartz replaced Mr. Johnston.

Three directors were re-elected for three-year terms. They were:—Edward J. Breck of John H. Breck, Inc., New York; Oscar Kolin of Helena Rubinstein, Inc., New York, and Wrisley B. Oleson of Allen B. Wrisley Company, Chicago. Dr. Victor G. Fourman of Syntomatic Corporation, New York, and Paul E. Roehrich of Richford Corporation, New York, were added to the board as representatives of TGA's associate members.

Reporting on the problems faced by TGA during the past year, Stephen L. Mayham, executive vice-president of the association, drew special attention to the excise tax. He termed it "one headache" which, primarily through TGA's efforts, "is only half as severe as it was a year ago."

Mr. Mayham felt that the newspaper reporting on this development was somewhat faulty, giving the impression that "this halving of the tax rate just naturally fell into our laps through the goodness of the Lord and the graciousness of the congress." This victory was not an automatic one, he asserted, adding that "it took many hours of hard work and a good deal of planning, with the strategy and the timing subject to change without notice."

Cites Supporters, Opponents

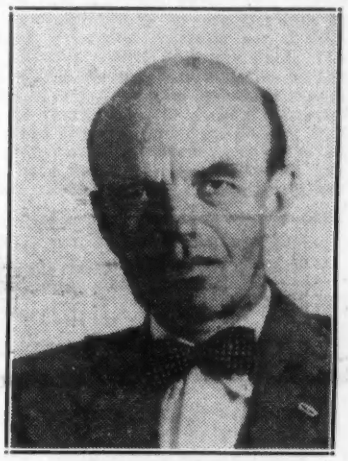
"We had a good deal of help from worthy sources," the TGA executive vice-president stated, "and in this connection I want especially to mention the work of Jack Reck of the National Beauty & Barber Manufacturers' Association. But we had some pretty serious opposition as well. The Treasury Department was strongly against us. The President supported their position vigorously with both congressmen and senators. In fact, at one time there was strong possibility of a veto of the tax relief measure. However, due to the fine work of Fuller Holloway and other members of the firm of Hamel, Park & Saunders, your Washington counsel, the bill was finally passed in a form which the President could not very well veto. I will say that the President accepted the result with very good grace, even though it did represent a defeat for one phase of his program."

In connection with the excise tax, Mr. Mayham wondered, whether, despite the spate of newspaper and magazine publicity, "more than a small fraction of the public yet knows that on a ten-dollar cosmestic or perfume purchase the price has been cut a whole dollar." He noted that reports from the retail trade indicate "that there has been no very startling pickup in sales since April 1, even on the high priced items."

Publicity on 'Reduced Tax' Urged

He pointed out that the association has suggested to its membership "that every possible step should be taken to acquaint the ultimate consumer that her cosmetics and beauty aids now cost her less. I do not want to labor the point but I do believe that on every occasion where you mention price, and accordingly have to mention tax, it should be emphasized that it is a reduced tax. We are attempting to enlist the support of the stores for this method of telling the consumer the good news. In that, every member of the association can be of great assistance. Please use all of your influence with the stores in this effort to mention 'reduced tax' on every possible occasion."

Turning to what he termed "another somewhat mitigated headache"—industry relations with the Federal Trade Commission—Mr. Mayham reported that the atmosphere surrounding these relations "is a great deal better than it was a year ago." He attributed this improved situation in part to the new policy developed by Edward F. Howrey, chairman of the FTC, and in part to efforts made to better



Stephen L. Mayham
Executive Vice-President

the relationship between the commission and the toilet goods industry.

"Perhaps the 'new look' in the trade commission can best be understood by considering a matter which was fortuitously settled through the work of your association since last we met," Mr. Mayham said. "All of you are, of course, familiar with the newer types of lipsticks which have had such a great impact upon the market recently. All of you will probably remember the vigorous and compelling advertis-

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Solubility in water	In all proportions
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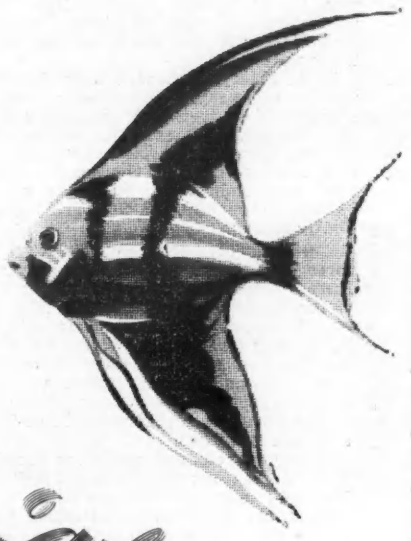

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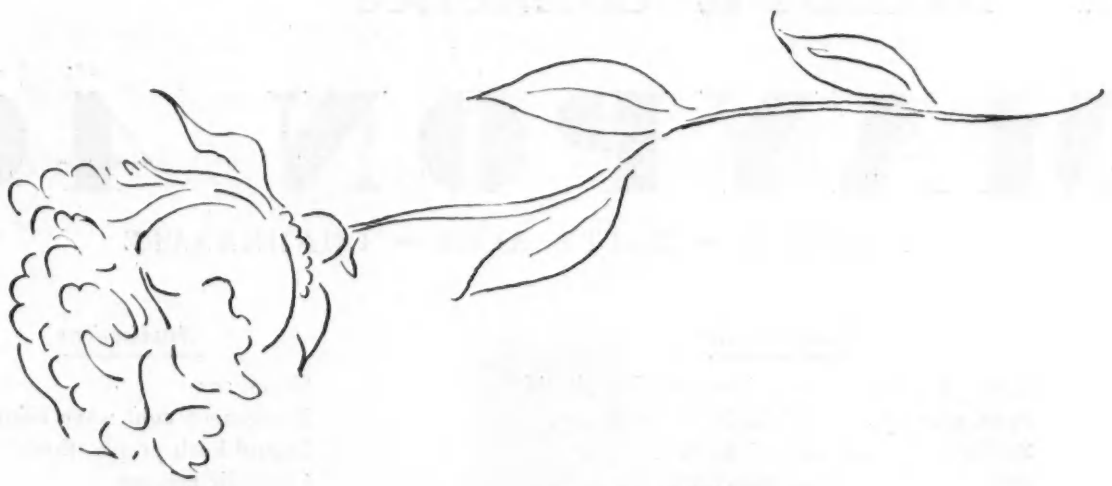

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A. E. Johnston
Elected Vice-President

ing with which these lipsticks were placed upon the market. Some of you will recall that the trade commission made a rather thorough study of the claims made for these lipsticks.

"As a result of these detailed studies the commission reached the conclusion that the words 'indelible,' 'non-smear,' 'no smear' and 'smear proof' and words of like meaning, could not truthfully be used to describe these lipsticks and the commission wrote to the manufacturers of lipsticks advising them of this view. Had all of these words been banned, which was the original plan of the commission, you can well see that a further development of the lipstick market and especially the market for lipsticks of the newer type would have been halted. No one could have described the merits of his product in any compelling terms.

Formation of Lipstick Committee

"At that point," Mr. Mayham went on, "your association formed a committee of lipstick manufacturers to consider what steps should be taken to prevent unfair and unwarranted action on the part of the commission. After a series of meetings in New York, we asked for an informal conference in Washington with commission staff members which was granted. Seven members of the lipstick committee and I attended this conference which was presided over by James A. Horton, chief of the bureau of industry cooperation. I can report to you that half-way through that meeting we were getting rapidly no place and it looked as if the matter would end in long and costly litigation between the commission and the industry.

"At that juncture it was suggested that these lipsticks were indeed of a newer type and that the public had come to recognize the type and the words 'indelible' and 'non-smear' as descriptive terms for them. It was also suggested that these two words be permitted when accompanied by the word 'type' in immediate conjunction and in the same size type. The commission assented; the industry agreed; and that agreement was later approved by the commission in the form of an interpretation of the trade practice rule on advertising. I have no hesitancy in saying that this agreement saved the industry and the government millions of dollars and accomplished what both the government and the industry desired, namely, the prevention of deception of the public."

Trade Practice Rules Progress

In regard to trade practice rules, Mr. Mayham stated, "Some progress has been made in clearing up the muddied situation with respect to these rules but it is not as great as either the commission or the industry would have liked it to be. One of the most forward looking steps taken by the commission was the appointment of P. B. Morehouse to the post of heading up compliance and enforcement of the rules by the commission. I am sure my friend PGad will not object to me describing him as an extremely tough character. Even if he does, I shall so describe him. But at the same time, may I say that he is as fair in his viewpoint and his attitude as any man in the world could be. He also has an unusual grasp—for a bureaucrat—of the problems of the manufacturer and the retailer in our very complex method of distribution.

"Almost all of the manufacturers have developed merchandising plans under the rules and I am advised that the great majority of these plans are satisfactory to the commission. The attitude of many of the retail stores has, as many of you know, not been very cooperative. In some cases cooperation has been lacking to the point where legal merchandising plans could hardly be installed. I can tell you that Mr. Morehouse is well aware of this situation and I can also tell you that a comprehensive spot check of the effectiveness of the rules is being started.

Recent FTC Decisions

"At the same time," Mr. Mayham pointed out, "the situation has been complicated to some extent by recent decisions. In the first place in a recent public address, commissioner Carretta announced what should have been known to everyone anyway, that the rules could be enforced against industry members regardless of whether they participated in the trade practice conference at which the rules were considered, or whether they accepted the rules after they had been promulgated. I say it should have been known to anyone on the basis that the rules are merely a restatement of the law governing trade practices and that everyone is bound by a law even though he may not like it or agree with the economic or legal theories which underlie it.

"Then there was a decision in a case involving price discrimination under section 2(a) of the Robinson-Patman act in which the court held that the commission on violations of this section must prove an adverse effect upon competition. In other words it was not sufficient merely to prove that there had been a discrimination in price as between two customers but an adverse effect upon the competitive situation also had to be proven. It is notoriously difficult to prove in a legal sense that any action has or has not an affect upon competition. Now this case was brought, as I have said, under section 2(a) which covers price discrimination.

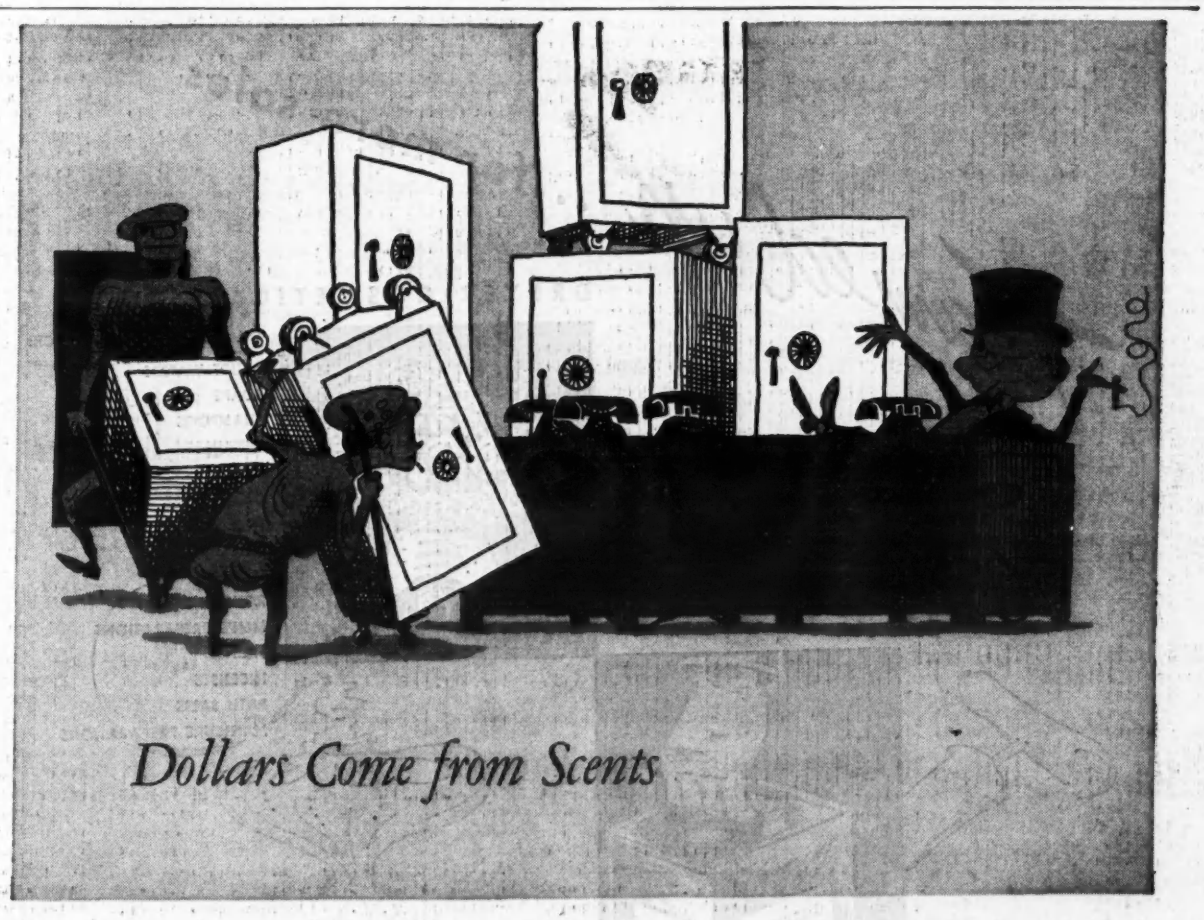
Discriminations in Toilet Goods

"What we are generally up against in this industry," the TGA executive vice-president emphasized, "are discriminations in the furnishing of service and facilities (PM's, advertising allowances and the like). It is generally felt that price discrimination is a more serious offense, so whether the courts would carry the reasoning of this decision over to cases under sections 2(e) and 2(d) which are the sections relating to services and facilities cannot be said at this time. If it should be carried over to these two sections, it is not too strong a statement to say that enforcement of the key provisions of the trade practice rules would become so difficult for the commission, as to make enforcement virtually impossible."

In summing up the trade practice rules problem, Mr. Mayham declared, "This particular headache has eased up a bit, but we still have it, and any morning I'm likely to find it again on my desk in aggravated form."

Industry Relations With FDA

The industry's relations with the Food and Drug Administration was termed by the speaker as a problem "which is getting steadily worse" and for which a proper remedy has not yet been developed. "Over a long period of years," Mr. Mayham recalled, "the relations between the toilet goods manufacturers and the Food and Drug Administration have been of the finest. Under a series of commissioners we have been consistently able to approve of the views and attitudes of the administration, even when, as occasionally happened, they would take enforcement action against some member of the industry. Usually they were right. Rarely was their philosophy of the working of the food, drug and cosmetic act at variance with that of the industry itself. The truth of this statement is attested by the history of the law and its enforcement over the years since 1938 when cosmetics first were brought under it. During that time only about 200 cosmetic cases of all kinds have been adjudicated while the number on drugs has run into the thou-



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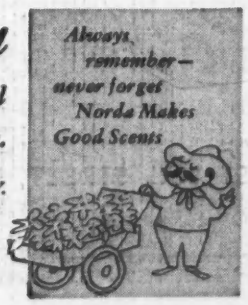

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sands and on foods into the tens of thousands."

However, he went on, recently a new philosophy appears to have grown up in connection with FDA's enforcement efforts. "It might be called the philosophy of protecting the public against every hazard of living, something which is manifestly impossible," he declared. "Any attempt by enforcement officials to bring about such an end, even if it were admitted — and I did not admit it — that such an end were desirable, would result in the collapse of legitimate and proper enforcement and a multiplication of absurdities.

Alleged Enforcement Absurdities

"I regret to say that from the standpoint of proper law enforcement the point of absurdity has been reached in a number of recent instances," the speaker asserted. "For example, by feeding coumarin in pretty hefty doses to certain kinds of experimental animals, some fairly serious results were observed by the manufacturers of coumarin. Of course, coumarin has been consumed for upwards of seventy-five years by humans in ice cream, cakes, candies and other things in which artificial vanilla extract has been used. People haven't died. Very few have gotten sick, unless it was from over-eating. Cows, rabbits and other animals who like the taste of sweet clover or alfalfa have probably eaten a great deal more than humans have. The lovely odor of freshly cut clover or alfalfa is due to coumarin almost entirely.

"I do not recall that any of my grandfather's large herd of cattle, with whom I had too much contact as a lad, ever got sick from the clover or alfalfa, although sometimes in the spring the butter would taste a little strange for a few weeks. However, the administration, upon receipt of the evidence developed by the manufacturers, jumped to the conclusion that coumarin should be barred in food and they have barred it. I think the food and flavor interests should have fought to continue its use. In my opinion they would have won and saved themselves and us a lot of later trouble.

Lack of Proof Mentioned

"Later on," Mr. Mayham related, "two children got mildly sick from eating candy covered with certain certified colors. No one actually proved that the dyes caused the illness, but the pharmacology staff of the Food and Drug Administration got themselves into a terrible dither over it. They fed huge quantities of the dyes to experimental animals, something in the nature of a thousand times as much as anyone could get in a normal diet of products colored by the use of these dyes. Some of the animals died. I don't blame them on the diet they received. Some got pretty sick. Some got well.

"By another record standing conclusion jump, the administration held that the dyes were dangerous and should be removed from the certifiable list. And on the basis of over-feeding to experimental animals they sought to remove these dyes from the certifiable list, not alone for foods but also for drugs and cosmetics. Admittedly there is not one scintilla of evidence that the pure dyes themselves when applied to the skin do any harm whatever.

Classes of Certifiable Colors

"For reasons of convenience," it was pointed out, "when it was necessary under the law to develop a list of colors harmless in foods, drugs and cosmetics, a peculiar and probably illegal set of classifications was established. There are three classes of certifiable colors. The first consists of color suitable and harmless for use in foods, in drugs and in cosmetics; the second of colors not harmless and suitable for use in foods but harmless and suitable for use in drugs and in cosmetics, and the third not considered suitable and harmless for use in any product to be taken internally but suitable and harmless for use in externally applied drugs and cosmetics. The reason why I said that these classifications were probably illegal is that the law in three separate and distinct paragraphs directs the administrator to set up regulations for the certification of colors.

"One of these paragraphs (sec. 406(b)) covers foods only; another (sec. 504) covers drugs only, and a third (sec. 604) covers cosmetics only. If this separate and distinct treatment of the subject by congress means anything, it means that congress recognized differences among foods, drugs and cosmetics and the ways they were used and desired to set up lists of certified colors separately for each of these groups of products. Otherwise, and had congress not recognized such a difference, it is reasonable to believe that the subject of color certification could have and would have been covered in a single paragraph.

FDA Decertification Action

"As a matter of convenience and under the pressure of time," Mr. Mayham explained, "the administration decided not to abide strictly by the law and set up three separate and distinct classes of colors, one for foods, one for drugs, and one for cosmetics. Instead they set up the three existing classes which thoroughly mixed and confused the situation. However, industry did not at that time and has not since protested the classifications, believing of course that a rule of reason would prevail and that the administration would always proceed as if guided by the dictates of common sense. That it always has until very recently when the current coaltar color ruckus started.

"When it was discovered through the forced feeding of laboratory animals in excessive dosages that they could be adversely affected by large quantities of some of these colors taken internally, the administration started decertification proceedings against three of them, FD&C oranges Nos. 1 and 2 and FD&C red No. 32. Much to our surprise, the proposal was not to reclassify these as colors harmless and suitable for use in drugs and cosmetics, thereby removing them only from use in foods where there was some slight evidence of possible harm from excessive ingestion, but to remove the certification privilege for drugs and cosmetics as well.

Industry Protests Informally

"We protested informally without success and finally, and with reluctance, appeared at the hearings, where we clearly established that no evidence existed that any of these colors could cause any harm when used in cosmetics. In this may I say that we were supported by several of the important drug manufacturers. The food industry, excepting for that small segment of it represented by the orange growers who color their fruit, was conspicuously absent, although in my opinion they could readily have defended the use of the colors in food, so weak was the government's evidence. Surprising and disappointing was the lack of support which we received from the manufacturers of these colors, who depend to some extent upon the cosmetic industry for their existence. They appeared by counsel but the only evidence which they adduced was completely useless to you in your effort through the association to maintain your rights under the law.

"The record established at the hearings, if interpreted correctly," Mr. Mayham stated, "can result only in the reclassification of these colors as D&C colors, thereby preserving their use in drugs and in cosmetics where they are wholly harmless and suitable for use. The administration has not at this time issued its findings in the matter. I am happy to be able to report to you that, should the findings be adverse to us and not in accordance with

Welch Packaging Awards To Velo-Derma, Mennen

Velo-Derma, Ltd., a division of Charles of the Ritz, Inc., New York, and the Mennen Company, Morristown, N. J., were recipients of the Charles S. Welch memorial packaging awards for 1954, the former for the most outstanding package in the opinion of the judges in 1953 in the price classification of over $1 and the latter for items $1 or under. The winning packages were the Velo-Derma treatment line and Mennen's men's line. Richard Salomon accepted on behalf of Velo-Derma, while W. C. Mennen, sr., accepted for the Mennen Company.

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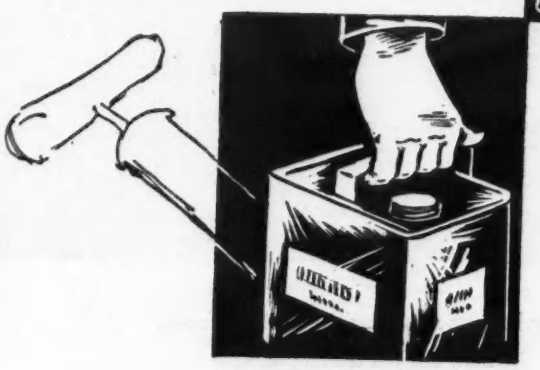

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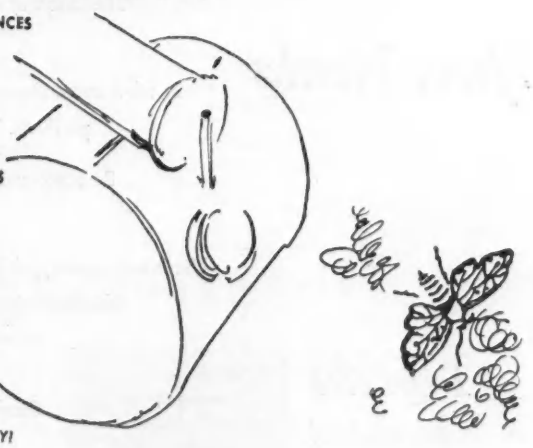

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Davis Factor
Retiring President

the record of the hearing, your directors have authorized me to take whatever steps may be necessary to protect your right to use these harmless ingredients.

Tests Being Undertaken by FDA

"We have now learned," he continued, "that the administration's division of pharmacology is running animal tests on the entire list of coaltar colors now certifiable as FD&C colors and will thereafter proceed in the same way with the present D&C colors and ext D&C colors. It has further undertaken similar studies on a list of some fifty chemicals used in the food and flavoring industries and also to some extent in cosmetics. Most of these chemicals have no adverse history in use or in the literature. To me this is a tremendous waste of the time and fine scientific attainments of the staff of the Food and Drug Administration.

"When there are so many violations of the law to police and to process; when the administration is complaining bitterly that its funds are not sufficient to protect the public against frauds in adulterated and misbranded products, and when no complaint nor suspicion of harm to consumers has been reported from ingestion of most of these products, I am moved to inquire why your money and mine is being wasted in a senseless effort to prove what everyone knows, that almost any substance is harmful if the dosages in which it is fed are large enough.

"There are things in all three of the industries covered by the law which need investigation and correction far more than the mythical harm caused by ingestion of quite harmless dyes and chemicals. I do not like to criticize the administration, which is staffed by a fine body of men and which in the past has done an outstanding job of enforcement, but their acts leave me no other alternative," the TGA executive vice-president concluded.

Retiring President's Report

In citing the achievements of his administration, Mr. Davis, the retiring TGA president, re-emphasized Mr. Mayham's statement that the reduction of the federal excise tax on cosmetics was not automatic. "Actually what happened," he explained, "was the happy result of tremendous political and educational efforts that have been continuously waged since the end of World War II to impress upon the legislators the fact that a tax on the products was an inequity."

Mr. Factor, who is board chairman of Max Factor & Co., Hollywood, Calif., recalled that "complete elimination of the tax was almost accomplished at the beginning of the Korean war, but of necessity it had to be dropped. But the efforts behind this movement were not dropped. The deep impressions that had been made were carefully conserved and further cultivated at every possible opportunity. That our labors bore fruit and that the legislators and tax authorities were alerted to the feelings of the public on this matter can be readily illustrated.

Congressional Statements Noted

"On March 10, 1954," Mr. Factor continued, "in a debate on the excise tax bill in the House of Representatives, Rep. Reed of the ways and means committee, stated to other members of the committee that with the lessened taxes they would find it much nicer to go to social functions as many had just about given up attending them because of being continuously cornered by indignant women protesting the high excises.

"Rep Lane stated: 'Industries whose taxes remain high certainly have a strong case when it comes to asking for tax relief, but as long as we can't reduce all taxes suddenly and completely I would prefer to make the first concession to women and their indispensible cosmetics, for there is a power beyond reckoning.'

"These remarks," the speaker contended, "establish the efficiency of the Toilet Goods Association and the other trade associations efforts to keep our legislators constantly aware of the necessity of easing this iniquitous tax." However, he cautioned that the job is by no means finished, and promised that "TGA will work aggressively and constructively, looking forward to the entire elimination of the excise tax at the earliest possible moment."

Sales Again Over a Billion Dollars

Mr. Factor reported that 1953 was again a billion dollar sales year for the toilet goods industry, the second year in a row this has happened. He also pointed out that last year's total sales volume likewise showed "a respectable increase over the preceding year."

"Most channels of distribution showed an increase with the exception of a small decline in drug store and variety store sales," he explained. "Altogether, though, the trend continues upwards, and with continued effort to improve merchandising policies and practices, and with the cooperation of our friends in the retail outlets, the progress of our industry will continue.

"We must of course warn against complacency. The future requires even more imagination and resourcefulness than in the past. The competitive spirit of the industry is greater than ever, and the share for each of us in cosmetic dollars is only what we ourselves would make it. Our markets are growing in numbers, and we are still far away from what any of us could reasonably term a point of saturation. This will never come as long as we continue with the thought uppermost in our minds that our products must deliver to the consumer real and recognizable results with which they can achieve greater beauty, attractiveness and better grooming.

"We must not stop our creative efforts simply with our product and package," the outgoing TGA head contended, "but must move forward in the presentation and promotion of our products to the consumers; in this phase the wholehearted cooperation of our friends in the retail part of our industry is required. For they, too, can reap the benefits, and every alert individual in the retail activity of the cosmetic industry knows full well that there is still a tremendous potential that has not been touched and is waiting to be realized by those who have the will to reach out."

Mr. Factor reported that the toilet goods habits survey, presented at TGA's 1953 convention, has been the focus of a series of thorough-going discussions during the past year by the association's officials. "Since this was the first survey of its kind," he stated, "we expected that it would have some weaknesses; now, though, we have a much better basis on which to proceed. The deficiencies of the first survey can be overcome, and the directors and officers of TGA will seriously consider the continuance of this activity during the coming year.

Aid to Market Researchers Cited

"The survey has been very interesting and quite helpful to the market research departments of firms who have skilled statisticians, but we feel that it would be more helpful in the future to have this survey in a form that will be much clearer and more easily digested and understandable. In this respect it would be most helpful if the members of TGA would write to Steve Mayham and express their opinions of the last survey and offer suggestions for its improvement. This

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will be very helpful to Mr. Mayham and to your board of directors in determining whether this activity will be continued in the future.

"My personal belief is that the survey can be a very valuable instrument to the TGA, and I hope that this feeling is shared by the majority of our members. But the only way we will know this will be by your expressions."

Mr. Factor recalled that last year the Department of Defense asked TGA to "assist in an educational program designed to educate the young women of the armed forces in the principles of good grooming at the five recruiting centers then in existence."

"Your association was honored by this request and steps were taken immediately to cooperate to the fullest extent," he reported. "Fortunately, the hostilities in Korea came to an end and with this, the particular urgency of the moment somewhat lessened. However, the TGA has proceeded with a portion of the original program and has in work, and nearly completed, a good grooming manual that will teach women in the armed forces the proper use of cleansing and beauty aids and grooming requisites.

"Due to changed conditions, the Defense department asked that we withhold for the time being the sending of a Toilet Goods Association traveling representative to personally conduct classes at the various recruiting centers. But whenever this request is repeated, the TGA stands ready to go ahead with its original program. Even in its somewhat curtailed form, this activity should prove to be beneficial to our industry as a whole, as well as a service to the nation.

TGA's Cooperation With Government

"The TGA has always prided itself on its spirit of cooperation and the good relations it enjoys with the various government agencies who are interested in our industry. The rough spots in this relationship during the past year have been comparatively few, and these have been very ably handled by Steve Mayham and our counsel both in New York and Washington.

"One of the pending proposals that is objectionable to our industry comes from the Food and Drug Administration, a department with which our relationship has been most amicable over the past years," he went on. "However, in this instance we have seen fit to object to the method of procedure that the FDA is following in seeking to remove certain coaltar dyes from the certified list for use in cosmetics.

"Briefly," he said, "the government wishes to completely eliminate the use of certain colors and dyes simply because their use in foods alone has become doubtful. These materials can be and are constantly used very safely and without any harmful effects in our cosmetic industry. To eliminate them because of their doubtful use in foods would cause a great deal of inconvenience and hardship in our industry and, frankly, we can see no sound logical reason for their use to be denied to the cosmetic industry.

"If the government wishes to restrict their use by the food industry, it shouldn't necessarily follow that it must restrict their use by all industries where the preponderance of evidence and past history shows these dyes to be entirely harmless and absolutely safe for the other industries.

"Another matter which has come up very recently," Mr. Factor continued, "is the proposal advocated by the Randall commission to double the present duty-free limit and permit $1,000 in merchandise to be brought in from foreign countries by any individual every six months. This of course would have dire consequences to the perfume and fragrance segments of our industry, and the TGA will take a very definite position and do everything possible to forestall the enactment of such a regulation.

Pierre Harang
Elected Vice-President

Mr. Factor on Trade Rules

"There is very little new to report with reference to the Federal Trade Commission and the fair trade practice rules. The commission has been reorganizing and it is only comparatively recent that very much attention has been given to the rules. There seems, however, to be a much better understanding by the commission of the practical business problems of the industry. This, too, we can proudly point out as an achievement of the Toilet Goods Association. Our future relations with the commission in regard to these rules should be on a very sound and practical basis, and with a spirit of cooperation the problems should be held to a minimum, with any doubt or misinterpretations clarified and resolved on an equitable basis."

The retiring TGA president closed with a warning against complacency. "The very nature of the dynamics of our economy calls for a continuous aggressive and intelligent response to our daily problems," he declared.

"The competitive spirit of our industry," he stated, "is so great that to survive requires constant creative thinking and development, and also vigilance against the deteriorating influences that have no doubt created serious problems for everyone. I of course refer to the continuance of the increased costs of doing business in all categories of our activities, and without the compensating factor of receiving a greater return. All companies are confronted with this problem. What the outcome will be is difficult to predict, except that in many cases survival may require a much greater effort to achieve an efficient operation. Without a fair return the creative efforts of our entire industry will be stilled."

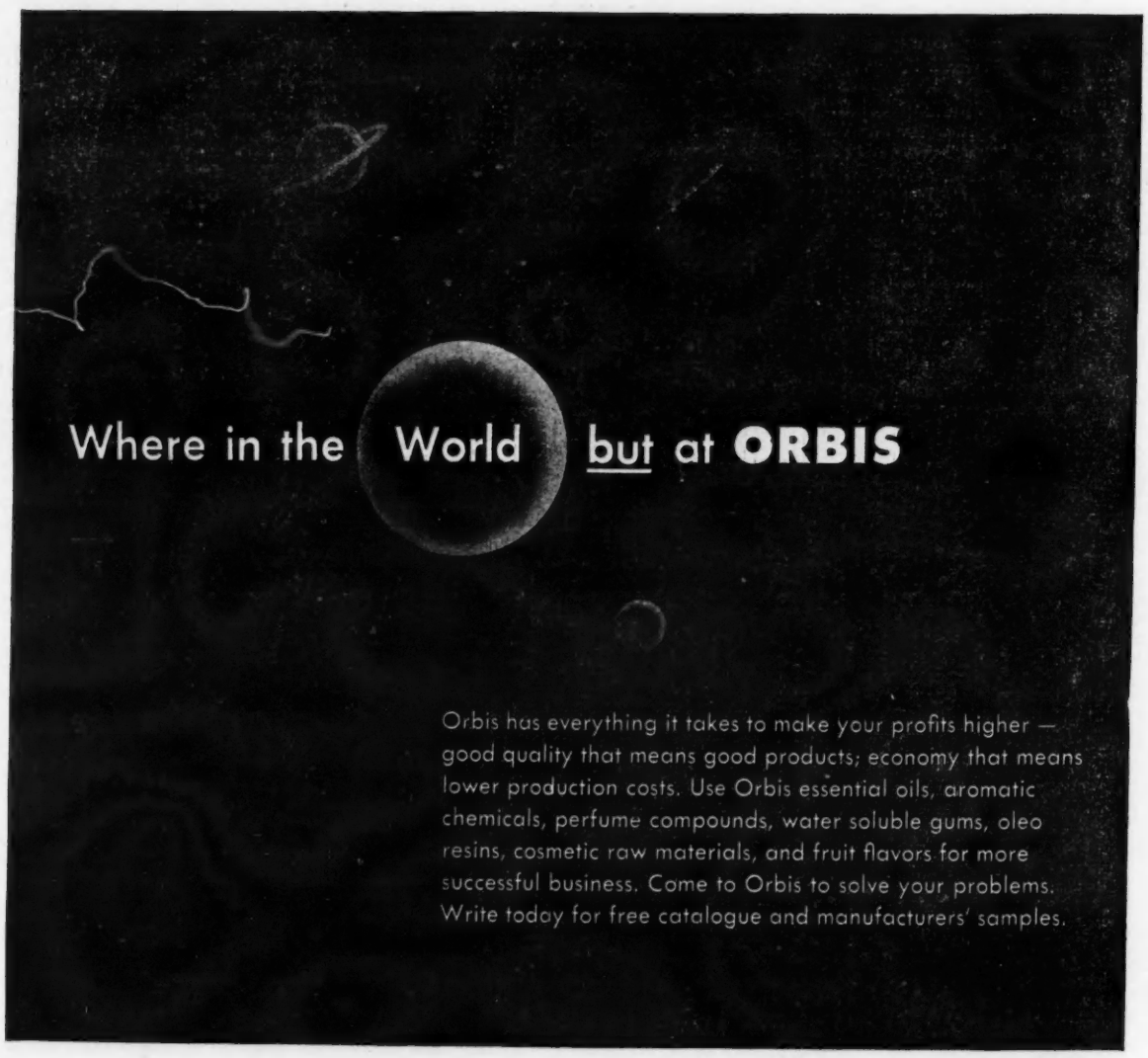
Report of General Counsel

In his report to the convention, Hugo Mock, TGA's general counsel, noted that "there is a constant and growing tendency to hamper the toilet goods manufacturer with more taxes, more reports and more responsibilities, which makes a successful conduct of business increasingly difficult." However, he also pointed out that there are "some bright spots in the picture."

Specifically, Mr. Mock declared, "The most dramatic event of the past year was the reduction of the cosmetic excise tax from 20 percent to 10 percent. While this is a source of great satisfaction to the industry, it is as your executive vice-president has constantly reminded you only an intermediate objective, for as long as the discriminatory tax exists it is one of the objects of the Toilet Goods Association to cancel the excise tax altogether. Unhappily, for the legislator there has always been a great attraction in the excise tax on account of the ease of collection and once settled on the consumer it is difficult to repeal. This does not mean, however, that the efforts of the Toilet Goods Association to get this tax finally removed from the statutes will be interrupted.

Tariffs and Tourist Baggage

"The American manufacturer of toilet articles has been penalized in two ways," he continued, "firstly by the general policy of lowering tariffs in favor of European products as much as possible and secondly by raising the exemption for tariff baggage to $500. This limit is now threatened with a bill introduced into congress to raise the amount to $1,000 which would be disastrous to many lines of perfumes and toilet articles. Whilst the objective of both the Republican and Demo-



Hugo Mock
General Counsel

cratic parties to increased trade with foreign countries is a worthy one, it so happens that with the prevailing high prices of all manufactured articles abroad, tourists are apt to concentrate on perfumes, which occupy small bulk, and even with the so-called protection of section 526 of the tariff act it is impossible to properly police all tourist baggage.

"It is well-known that the harassed customs inspectors in the past have never been able to properly police the baggage of incoming tourists. There is on the one hand the pressure by the tourists themselves to get their baggage examined and to be released, and on the other hand the physical impossibility of making a close and intensive examination of the baggage of all incoming tourists when frequently more than 1,000 tourists come back on a single ship.

"The increase of exemption to $1,000 would be disastrous to many lines of perfumes. The Toilet Goods Association through its Washington counsel is taking vigorous steps to combat the passage of this proposed amendment."

Federal Trade Commission

"Happier than they have been for some years" is the way TGA's general counsel put the association's current relations with FTC. "This may be due," he felt, "to a simple fact, which is that the present members of the Federal Trade Commission are business-minded and are attempting in bona fide fashion to cooperate with the toilet goods manufacturers in the construction and operation of the Robinson-Patman law. The cosmetic code will be enforced, but with as little friction as possible with the manufacturer. The word 'free' has now been defined in a more common sense manner, the commission having dropped the legalistic attempt to penalize the use of the word 'free' in any association involving a purchase of any kind. The advertiser and the seller is required to explain fully and clearly in simple language any conditions involving the word 'free,' which is quite sufficient for the protection of the consumer.

"It is safe to say" he went on, "that the procedure of the Federal Trade Commission in the last year or two has been less legalistic and more realistic regarding the operation of the average business concern. For instance, in the case of Federal Trade Commission v. General Foods Corporation, it was held that injury to competition had to be proved in order to hold a defendant guilty of discriminatory practices. Practically, the decision is a reversal of the Federal Trade Commision in the Morton Salt case; Federal Trade Commission v. Morton Salt Company, 334 U. S. 37.

Enforcement of Cosmetic Code

"Regarding the enforcement of the cosmetic code some question has arisen in the industry whether concerns, not members of the Toilet Goods Association, who have never acquiesced in the preparation or promulgation of the code would be bound by its provisions. Commissioner Carretta has explicitly declared that the rules in the cosmetic code apply to all members of the industry, whether they participated in the conferences and hearings or not. This is clearly the law, because the code itself could not go beyond the provisions of existing statutes."

Regarding relations with FDA, Mr. Mock pointed out that they "have always been cordial and intimate since the passage of the food, drug and cosmetic act in 1938." He noted, however, that there was a danger at one time that "legislation would be pushed to require new product permits for new cosmetics which would have been an unhappy and unnecessary piece of legislation as all toilet goods manufacturers are already guarantors of the safety of their products and are voluntary watchmen of their purity.

Raw Materials Specifications

"The Bureau of Standards," he continued, "is constantly increasing its supervision over the raw materials of the industry and raising the specifications desirable for such raw materials. The Food and Drug Administration has started to decertify certain of the certified colors which, while they may have proven objectionable for use in foods and drugs, have in no instance been shown injurious in the use of cosmetics or toilet preparations. Since the federal drug, food and cosmetic law provides separate certification for colors used in foods and in drugs and in cosmetics, it is thought there is no proper warrant for arbitrarily decertifying colors which have been proven satisfactory in the past and against which no evidence has been presented that they are injurious for cosmetics.

"The Food and Drug Administration has promoted a new factory inspection bill which was also approved by the Toilet Goods Association. While there was a great discussion on the details of the bill in congress, it is not thought that the details of the present factory inspection act will hamper the careful manufacturer. It must always be taken into account that certain animal products, such as hormones and other products such as animal sera, may enter as constituents into toilet preparations sold by members of the Toilet Goods Association. However, any such articles which are readily absorbed by the human skin are labeled as drugs and are subject to the drug regulations."

Turning to a discussion of states rights and taxes, Mr. Mock noted that the "margin between intrastate and interstate business is constantly narrowing." In this connection, he drew attention to the fact that "a number of states have assumed jurisdiction over companies which have no offices or resident salesmen in a state and some of which merely sell goods by mail.

"It is increasingly difficult," he declared, "for manufacturers to avoid the jurisdiction of the state tribunal, where their products have been extensively used in a state, even though the manufacturer has for tax purposes taken every legal precaution to avoid qualification in a particular state. It is apparently the theory of every state to extract a tax of some kind from any company doing business in that state, and the only way these taxes can be avoided in most cases is for a company to have no property at all in the state in question. At one time it was quite sufficient even where a manufacturer has an office in a state to have all orders reviewed at the home office in another state, but these precautions no longer take the company outside of the state jurisdiction. Where direct taxes cannot be levied, then 'use' taxes are being enforced wherever possible."

Product Liability

On the matter of product liability, he said, "manufacturers will be reminded on the wide publicity given to new ordinances regarding combustible liquids used, for instance, in hair preparations or nail polishes, and such ordinances are becoming increasingly difficult to obey where they are not uniform in various states. With the advent of aerosols there is a new hazard in product liability and it behooves the careful manufacturer to get guarantees of safety from all suppliers of containers, whether they are glass or metal.

"A new state trademark bill has been passed in New York state, known as the model state bill, conforming closely to the federal act," Mr. Mock reported. "In some cases there will be some advantage in New York state registrations, especially in such cases where federal registrations cannot be secured. New York state has

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also passed an important trademark bill, known as the dilution bill, which provides protection for trademarks which are distinctive and have acquired great secondary meaning against their copying by others, even for non-competitive goods.

Copyrights

"Through the decision of the New York Supreme Court, Mazer v. Stein, it has been held that the protection of the copyright statute does not apply exclusively to articles purely of artistic merit but that it can be extended to articles of utilitarian nature which are manufactured in quantity. It may be possible in the future to get copyright protection on novel bottles and boxes, though it must be mentioned that in all cases where copyright is claimed a copyright notice conforming to the statute must appear on every specimen of the article or of the reproduction of the article in print. It may be mentioned that this increasing copyright protection will afford some of the protection which is now given to packages or labelling abroad."

Exploring the problem of fair trade, TGA's general counsel commented, "The United States has created the greatest organization for the production and distribution of goods in history. Our production is the wonder of the world, but distribution still presents many knotty problems.

"The whole problem of fair trade is essentially a very simply one. For instance, it does not exist in the food trades because the total mark-up on foods is so small and the percentage of profit so slight that the grocer or super-market is quite content in his daily transactions to operate on a margin as small as that of a discount house. On the other hand, in many industries the margin between the price paid by the retailer and the price paid by the consumer is so considerable that opportunities for the price-cutter occur. It is self-evident that the retailer's discount does not represent necessarily a larger net profit in the drug or cosmetic or appliance field than the grocer's, but merely that in these fields the overhead and cost of operation is considerably greater than in the food field and the turnover is not rapid.

"In these essential aspects," he felt, "the problem of fair trade is one of extraordinary simplicity. The manufacturer wants to have as many satisfied retailers as possible and it is self-evident also that in order for this condition to occur prices to the consumer must be fairly uniform because the moment the retail price is cut, the business at least temporarily goes to the price-cutter and the retailer has dead stock on his hands.

Reasons for Price-Cutting

"A proper symposium on fair trade should really be a symposium on price-cutting and price-cutters. One reason for price-cutting is the human desire for a bargain. There are always individuals who want to get it wholesale and there are always other individuals who wish to satisfy that urge, even against the wishes and in defiance of the retail price set by the manufacturer. In fact, the price-cutter and the manufacturer are never concerned about the same things. The price-cutter is merely interested in a quick buck and fast turnover, and with his operations are associated very largely trade diversion, concealment of operations and at times direct encouragement of breach of contract between the manufacturer and some other retailer.

"On the other hand," Mr. Mock stressed, "the manufacturer's problem is not the retailer's profit, because the manufacturer's job should be over when he has sold the goods to the wholesaler or a retailer, but on the other hand retailers are not permitted by law to arrange with each other to fix prices. So the question of price control always comes back to the manufacturer. The manufacturer is solely concerned with the good-will and continued distribution of his product. What the manufacturer has done, has been to support the passage and the enforcement of fair trade laws which are essentially expressing in law his wish to control the price at which the consumer shall buy his product.

Jean Despres
Re-elected Vice-President

Retailer Services Cited

"I am well aware that there are economic arguments against this, some sound and some unsound, and that it is freely said that fair trade laws violate the spirit of free enterprise.

"On the other hand, it must be remembered also that retailers also perform a function by stocking the merchandise of different manufacturers, by demonstrating it and by performing a great many other services which the discount houses do not do. The discount house has only one argument and that is price appeal, and the discount houses do not care whether they disrupt or ruin the selling organization of any manufacturer.

"The discount house says, price should find its own level and retailers with unnecessary overhead should be weeded out. The retailer replies, and perhaps fairly, that if all retailing would be done by discount houses the whole structure of American production and distribution would cease, whereas if all discount houses disappeared, it is very probably that American production would not be substantially affected at all. It must be remembered that it is a fundamental principle of fair trade that every article must be in open competition with other articles of the same class.

Cases in State Courts

"So far," it was noted, "there has been no cure presented for the prevailing situation except the continuation of fair trade. It must be remembered also that there is an increasing tendency by state courts to invalidate non-signer clauses which are the very backbone of the fair trade laws, as is evidenced by adverse lower court decisions in Nebraska, Arkansas and Delaware. These cases will be appealed to the supreme court of these states. In Florida there are three cases pending before the supreme court of this state. One is from a favorable decision, and another is from an unfavorable decision.

"At present," Mr. Mock said in closing, "the only system which will stabilize retail prices and preserve the manufacturers' good-will is fair trade. It is true that our economists may tell us and with some plausibility that fair trade does not provide the very lowest prices possible to the consumer. So far, the industry in the United States has thrived on liberal margins for retailers. If there is a better method of distribution, research may ultimately find it out, but I have no inkling what it is. Perhaps a law against loss leader selling or selling below cost might be worth trying."

Scientific Director's Report

TGA's scientific director, H. D. Goulden, in his convention report, called attention to the fact that this year marks the tenth anniversary of the association's scientific section. He noted that since the section's inception, there have been twenty issues of its official publication, *Proceedings*, which have contained 176 technical papers.

Turning to the subject of certified coal-tar colors, detailed earlier by Mr. Mayham, the scientific director said, "When it was learned that a hearing was to be held on the decertification of FDC red 32 and FDC oranges 1 and 2 insufficient time

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H. D. Goulden
Scientific Director

was available in which to engage in any adequate toxicity studies. It was recognized that the use of a lipstick would result in the application of more color to the body than any other cosmetic and that this use would from most every standpoint be the maximum condition of exposure. A committee was quickly organized consisting of Orville Davenport of Avon, Dr. Paul Lauffer of George W. Luft Company and Dr. D. H. Powers of Hudnut. Experiments were undertaken to establish the amount of lipstick remaining on the lips after each application. Some 630 individual applications were studied. Another experiment was designed to determine the amount of lipstick used during a week, when the individual was permitted to use it in her customary manner.

Experimental Data Summarized

"It is not possible to include in this brief report the data developed during these experiments. A brief summary is, however, in order. From the first experiment it was learned that the maximum amount of pure dye applied at any one application was 2.38 mg., the minimum was 0.19 mg. and the average 0.8 mg. From the second experiment it was ascertained that the maximum amount of pure dye applied per day was 6.12 mg. and that the average amount was 2.11 mg. For the purpose of the following calculations, one may make a false assumption, namely that all the lipstick applied to the lips is ingested. It is a common practice to blot the lips on tissue after applying the lipstick, thus a goodly portion is removed. Other losses occur by contact with cigarettes, glasses, cups, etc.

"If we assume that all which is applied is ingested we certainly have introduced a safety factor. Let us assume that the daily food eaten amounts to one kilogram, which seems to be a conservative figure. It can be calculated from the above data that the maximum amount of pure dye that could be ingested would constitute 6.12 parts per million parts of the ration, or if you prefer, 0.000612 percent of the ration. The data developed in these studies was presented at the decertification hearing."

Statistical Analysis

In his closing remarks, TGA's scientific director touched briefly on the application of statistics to the toilet goods industry. "Statistical quality control," he reported, "is, I am happy to say, being installed in more and more companies. I am informed that where it has been installed it has been highly successful. It seems to me that if it is to be considered successful where applied it must result in better quality at the same or lower cost, or equal quality at lower cost. If it doesn't fulfill these criteria that particular application should be dropped. In most cases it does result in increased quality at lower cost.

"Statistical analysis can be applied to many phases of a company's operation, including management, sales department, analytical procedures, the planning of research, manufacturing processes, etc. The things it can do are surprising indeed. Few realize that the expert statistician can briefly study a process which is not running satisfactorily, retire to his calculating machine and shortly inform you that you better find out what is wrong with automatic valve No. 14."

FTC Head Discusses Trade Practices

A program of encouraging voluntary compliance with the law, backed by vigorous enforcement measures when necessary, was outlined for TGA by FTC chairman Edward F. Howrey. He cited the administration of the trade practice rules for the cosmetic and toilet goods industry as a good illustration of this two-pronged program.

Mr. Howrey disclosed that the commission has just directed an immediate investigation of the current pricing practices and promotional allowances of cosmetic manufacturers in selected trade areas. This is to ascertain the extent to which plans and policies previously submitted for commission clearance have been put into actual operation.

As the FTC head explained it, the commission is making "a spot check in different areas of the country to ascertain whether the sales plans, as reported to us, are in operation, what the effect thereof may be at the retail level, and whether current pricing practices and promotional allowances are in compliance with the rules." The field investigation, he added, will not be limited to the fifteen companies originally selected to initiate the operation of the plan but is aimed at covering the industry as a whole.

Who Will Be Investigated

"A number of major trading areas will be investigated—in the east, in the middle west, in the far west and in the south," Mr. Howrey went on. "In each area the investigators will examine several of the large department stores, two or more drug chains, a representative number of independent drug stores, a small number of the leading beauty shops, and a small number of cosmetic wholesalers or jobbers.

"The data to be secured will include manufacturers' pricing schedules, discounts, freight allowances, promotional allowances, promotional services or facilities furnished, cooperative advertising allowances, special deals, demonstrator services, and the like.

What FTC Hopes to Learn

"From these facts," he said, "the commission should be able to ascertain whether the various manufacturers are adhering to the sales plans filed with the commission, the extent, if any, of price discriminations, the availability and proportionality of advertising allowances, and the availability of promotional allowances for demonstrators, push-money paid to sales girls, and shop and counter display space.

"When this spot investigation has been completed the commission will have the whole picture. It can then decide whether the trade practice rules have done the job or whether it must proceed on a wholesale case-by-case basis involving formal complaints. If the rules do not work you can rest assured, 'with all the hay that is down,' that the commission will be compelled promptly to invoke its compulsory procedures. However, the fact that a few hard-core violations may turn up, requiring formal complaints, will not be enough to discredit the rules as a whole. One of the purposes of trade practice rules is to ferret out and pinpoint the willful violator.

"If the rules serve to promote voluntary compliance by major segments of the industry they will be hailed as a great success. And, perhaps more important from my standpoint, they will give impetus and understanding to one of my major objectives, namely, greater compliance with trade regulation statutes through cooperative and consultative procedures."

Mr. Howrey said he had been told by people within FTC and persons connected with the toilet goods industry "that the Federal Trade Commission is at the crossroads insofar as trade practice rules are concerned." He had been told, he said, "that if the commission fails to make the cosmetic rules work, the whole trade practice conference program may bog down."

Where Responsibility Resides

While admitting that these statements "may serve to needle the commission," the FTC chief contended that "they really place the emphasis on the wrong party." He felt that it is readily apparent to any-

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one who analyzes the problem that, in the last analysis, "the members of the cosmetic industry are the only ones who can make the cosmetic rules work." As chairman of FTC, Mr. Howrey pledged that he would do everything in his power to make the rules work.

"Such misunderstanding as may exist in this connection," he stated, "probably arises from a misapprehension of the nature of the rules. They are not substantive rules, having the force and effect of law, like those of the Food and Drug Administration or those soon to be issued by the commission under the new flammable fabrics act. They are in the nature of advisory opinions—an attempt by the commission, for the guidance of businessmen, to interpret the various statutes administered by the commission in language applicable to the particular industry.

"The rules are not and, under our statutes, cannot be enforced as such. When and if the commission invokes its formal procedures, it must charge a violation of the law, not merely a violation of the rules. Of course, a violation of the rule may well be a violation of law, providing all the statutory elements are present, such as, for example, under the FTC act, public interest, interstate commerce, and injury to competition or deception of the public.

Voluntary Aspect Stressed

"In short the trade practice conference is one—probably the most important one—of our voluntary procedures whereby the commission, through consultation and cooperation, rather than prosecution, tries to help business help itself."

Recalling the situation which led up to the issuance of trade practice rules for the industry, Mr. Howrey noted, "A few years ago the commission made a field investigation of your industry. Seventy-three individual companies were examined. The investigative reports showed, prima facie, that twelve were granting price discriminations in violation of section 2(a) of the Robinson-Patman act; forty-three were giving improper advertising allowances in violation of section 2(d); thirty-eight were using 'push money' in violation of section 2(d); fifty-five were furnishing varying types of demonstrators in violation of section 2(e); twenty-six were engaging in false advertising or misrepresentation in violation of sections 5 and 12 of the Federal Trade Commission act, and three were violating the Federal Trade Commission act by means of resale price maintenance in the District of Columbia, Vermont and Missouri.

Practicality of Rules Cited

"In other words," he continued, "it appeared that the seventy-three companies were committing 177 different types of violations. What was to be done about it? Obviously the commission, with jurisdiction over our entire multibillion economy, could not turn over all of its resources in time, money and personnel to the investigation and prosecution of 177 cases in a single industry. The trade practice conference procedure seemed to be the only practical solution.

"After much negotiation and hard work, which I need not now recount, trade practice rules were finally promulgated and approved. In both form and content they are, I believe, the best set of rules ever issued by the commission. Of the 1,805 manufacturers and wholesalers to whom copies were mailed, 340 sent back signed acceptances in which they stated they would observe the requirements of the rules.

"Compliance efforts were first directed to those provisions of rule 1 which are interpretative of sections 2(d) and 2(e) of the Robinson-Patman act. Over 200 firms were requested by 'survey' letters to furnish the commission copies of their sales plans and promotional offers. Eighty-six of these files were soon closed upon the ground that examination disclosed substantial compliance.

Compliance Procedure Set Up

"Last October the commission directed that every effort be made to expedite examination of the remaining plans and that the plans of certain major manufacturers be reviewed and additionally processed by the assistant general counsel in charge of compliance. The previous month I had appointed a committee to survey and recommend improved compliance procedures for all types of cases. Following consultation with this committee a compliance procedure for the cosmetic rules was planned and put into operation.

"This procedure," Mr. Howrey explained, "contemplated that members of the industry would be plainly advised whether their plans were deemed to be in substantial compliance with the rules or whether further adjustments were needed. If it appeared that industry mem-

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DETROIT — D. H. Osgood Co.
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KANSAS CITY — John T. Kennedy Sales Co.
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PHILADELPHIA — Lose & Dilworth, Inc.
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bers were making little or no effort to comply, or failed and refused to submit sufficient information for proper evaluation, field investigators were to be arranged and the results referred to the bureau of antimonopoly for consideration and recommendation as to whether such matters should be brought to complaint and trial.

Fifteen Firms Named to Start Plan

"Fifteen major companies were selected to initiate the operation of this plan. After careful examination of the plans of the fifteen, as supplemented and revised, it was the opinion of the staff that the practices and policies of fourteen, if in operation, constituted substantial compliance with the rules. I stress the word 'substantial,' because, as Mr. Justice Holmes once said, 'Some play must be allowed for the joints of the machine.'

"In the case of only one of the fifteen," the FTC head reported, "was it necessary to institute a field investigation to obtain the required information. I think this speaks well for the kind of cooperation your industry is now willing to extend to the commission."

"Those whose sales plans and policies appeared to be in compliance were asked whether the plans were in effect and, if not, when it was proposed to put them into effect. Eleven said their plans were already in operation. Two advised that their plans were being placed in effect but were not yet in full operation. The remaining company's position was complicated by an existing court decree. All were notified that the commission expected the plans to be in full effect by April 1."

Advertising-Merchandising Panel

At a panel discussion on "Advertising and Merchandising in the Toilet Goods Field," J. I. Poses of D'Orsay Sales Corporation, New York, discussed some of the problems encountered by his company which he felt were pertinent to the field of toiletries manufacture in general. He commented on the fact that while new firms have come into the field during the years, some have failed and disappeared, while others have prospered. Those that have prospered have been the ones that have planned systematically, Mr. Poses stated. It is possible for a company to plan and, at the same time, keep its program flexible. Management can do this by using the new research tools available today, he declared.

Miss Van Davis of Ellington & Co., New York, discussed some of the similarities in selling "soft goods" and selling toiletries. Both groups of products must sell an intangible factor, namely, the feeling among women that their purchase will add to their beauty, which will make the purchase habit forming. This creates a paradox for the toiletries manufacturer, however, Miss Van Davis explained. The consumer must be convinced that the product will make her more glamorous and she must at the same time be kept as a consistent buyer.

Need for Imagination in Ads

The need for imagination in cosmetic advertising was emphasized by Jean Despres of Coty, Inc., New York. Mr. Despres pointed out that one advertisement cancels out another if one copies another. The successful advertisement must be different, he stated. An original promotion can be a very big factor in selling toilet goods, a fact overlooked by too many retail stores that fail to make the best use of the advertising material that is available to them. Mr. Despres advised retail stores not to take their toilet goods departments for granted, but to work with them in synchronizing their selling efforts with the overall advertising campaign put on by the toiletries manufacturer. Such an effort would increase interest and add to the traffic in the store, he stated.

Dr. O. L. Tinklepaugh of J. M. Mathes, Inc., New York, spoke of the cosmetic industry as one directed toward women but run by men. From this point of view, he noted that a man's attitude toward women in order to produce sales of a certain product should be centered around three factors:—Experimentation, to see what qualities women preferred in a certain item; packaging, in order to make the product attractive to women buyers, and the sales story, to tell women the advantages of the product.

The importance of the consumer as the essence of the cosmetic business was stressed by Mrs. Estee Lauder of Estee Lauder Cosmetic Company. She stated that her experience had shown that business could always be found provided you reached the consumer directly at the retail level. This direct contact with the consumer should include a good, accurate sales story, Mrs. Lauder emphasized. She advised against trying to oversell, but suggested concentrating on a few items, and while selling them, telling the full story of their use. Then after the consumer has used up her purchase, she will return for more of the same goods, since she has developed confidence in the brand and the people behind it.

The toilet goods industry is currently in pretty good shape on the whole, in the opinion of Meyer Katz of Gimbel Brothers, New York, the panel's final speaker. Although business was off about 3 percent nationally during 1953, and off another 3 percent nationally during the first quarter of 1954, Mr. Katz pointed out that sales in New York in April had been better and that May had started well and should be ahead of last year.

Mr. Katz attacked one important weakness in the advertising field, as he saw it. He noted that the influence of national, full-page advertising was weakest at the point-of-sale, the store. He pointed out that because of this situation, a good deal of the effectiveness of national advertising is lost.

Distribution Trends Forum

A forum entitled "Trends of Distribution" included short talks by Julian H. Handler, editor of *Supermarket News*, Leo Bertisch, president of United Cigar-Whelan Corporation, and Sidney Reisman, president of D. M. Read Company.

Mr. Handler assumed the role of a toilet goods executive seeking broader channels of distribution. He pointed out that only a few years ago presentation of the possibilities of supermarket distribution to a TGA gathering would have been daring, but that due to the high retailing costs of recent times, more and more attention has been turned toward this medium of selling. He pointed out that there were some 20,000 supermarkets currently in operation, each with an annual sales volume of $375,000 or more, and capable of retailing a wide variety of products. For example, it was noted that all supermarkets carry toothpaste, that some 99 percent carry shampoo, and that on an average, about 200 health and beauty aids are offered.

In discussing methods of selling in the supermarket, Mr. Handler stated that usually toiletries and cosmetics were placed carefully near entrances and exits, that nationally advertised brands were selected in order to ensure rapid turnover, and that those products which did not lend themselves to self-service usually were given a trained sales agent to handle them.

Mr. Handler concluded that the supermarket as an outlet for toilet goods manufacturers was worth considering, provided

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*Chemical Senses, page 1, Moncrief—lists senses as follows: "sight, hearing, touch, taste, smell." Note smell is listed Fifth.

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that a complete custom-made program was established for the toilet goods firm.

Conventional Drug Stores

Mr. Bertisch presented the attitude of conventional and self-service drug stores as a means of distribution. He pointed out that capital investment in conventional stores was higher than that for self-service stores due to high rents, the need for efficiently trained help, the large floor space taken up by lunch counters, and the generally small area of this type of store as opposed to double the area for self-service stores.

He said that more and more, drug store chains were turning to suburban areas, where larger floor space could be had at a reasonable cost, and where supermarket technics could be applied which would effect substantial savings in operating costs. He also maintained that careful selection was employed concerning the suburban area in which the large self-service drug store would be located. It was felt that the recent suburban expansion of drug chains, coupled with self-service technics, would recapture the losses to variety outlets sustained in the past by drug stores.

In conclusion, Mr. Bertisch said that the continually expanding services of drug store chains were worthy of consideration by toilet goods maufacturers, due to the fact that consumers have been used to buying drugs and cosmetics in drug stores, and that such a habit will bring them back.

Role of Department Store

Mr. Reisman explained the role of the department store as a channel of distribution. He maintained that at one time price alone governed the volume of sales, whereas at present, owing to higher standards of living than previously, consumers gave more attention to the quality of goods and services. He said that for many years toilet goods and cosmetic counters had played a very important and profitable part in department store sales, and that such outlets were valuable to the manufacturer through advertising, services, and other features designed to bring the merchandise before the public eye. Maintenance of basic stock was a difficult problem, he felt, because careful supervision of supplies was needed, as well as the advantage of a quick turnover.

He felt that manufacturers should not place too much emphasis on the off-price sale as a means of furthering consumption. It was pointed out that if such a type of sale were stressed, consumers would become confused as to the quality of various products, and department stores themselves would be hard-pressed to maintain a reasonable margin of profit.

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Cosmetic Chemists Explore Gains

The Society of Cosmetic Chemists, at its semi-annual technical meeting May 14 at the Biltmore hotel, New York, ranged over a wide variety of scientific topics—from enzyme inhibitors for dentifrices to research-management relations.

R. S. Manly of Tufts College Dental School, Boston, Mass., reporting on "Enzyme Inhibitors for Dentifrices," noted that an inhibitor survey program has been in progress at Tufts since January of last year. The purpose, he said, has been to make a study of the ability which a wide variety of compounds may have for inhibiting acid formation by salivary sediment. The aim is to disclose those which may be potentially of value as inhibitors for dental caries.

During this period of time, Mr. Manly stated, more than 1,300 compounds or substances from sixty-five sources were studied. The procedure, he went on, is classed as a "primary" screening process but it imposes more requirements on the successful compounds than do the usual salivary tests.

Substances Receiving Plus Values

The procedure was reported to give positive values for those substances which are able to diffuse through a gelatinous mass similar to that found on human teeth, which can inactivate in some way the process by which enzymes form acid from sugar within this bacterial mass, and which also remain bound to the sediment sufficiently to give inhibition for a period of one or more hours. The usual salivary tests for inhibition do not require diffusibility or absorption, it was said.

Nearly 200 of the total substances tested can be classed as amines containing no other groups except perhaps alcohol, ether or ester, Mr. Manly pointed out. Among these were thirty-four substances tried in 10 percent propylene glycol as a solvent which has been shown to promote activity, at least among the alcohol derivatives. Eight of the substances showed over 70 percent inhibition. The remainder, it was noted, have been tested in water.

The C_{18} primary or tertiary aliphatic amines were shown to have inhibitory powers perhaps by action as absorbed buffers. Compounds with fewer carbons in the chain or higher molecular weight were inactive. Certain ethylenediamine derivatives containing moderately long alkyl radical on one nitrogen and a short or no substitution on the other showed considerable activity as did also similar groups of compounds, the imidazoline and piperazine derivatives.

The program is called a primary screening procedure, it was explained, since it calls attention to reasonable numbers of compounds that merit further study. Promising chemicals should be subjected to additional tests involving questions of toxicity, of rapidity of penetration within the period of time that dentifrices are used, and of duration of action for periods up to twenty-four hours, it was stressed. Finally, Mr. Manly said, there should come tests in vivo by subjects using dentifrice. He recommended in general that a series of screening technics be used, each succeeding one more exacting and perhaps more costly than the one before.

D. W. Brookfield and W. B. Brookfield of Brookfield Engineering Laboratories, Inc., Stoughton, Mass., in a talk entitled "A 'Real Logical' Approach to Viscosity," discussed fundamental rheology (the "science of flow") with particular emphasis on thixotropy and plasticity. Problems due to the vagaries of rheological behavior were shown to be universal and the desirability of transmission of information between dissimilar fields was demonstrated. Discussed, too, were the advantages and disadvantages of the principal methods of testing. In addition, available types of instrumentation were reviewed.

Importance of 'Multi-Point' Measurements

The speakers explained the growing awareness of the importance of "multi-point" measurements, dealing with some of the "viscosity" problems of the cosmetic chemist from the viewpoint of the measurements required. Some "in-plant" materials handling problems are created by rheological properties and require close cooperation between chemist and engineer, it was pointed out.

Messrs. Brookfield also went into the subject of product quality and end use plus customer acceptance in terms of viscosity control. They closed with a plea for better communication between instrument users and instrument manufacturers to insure that design and construction fea-

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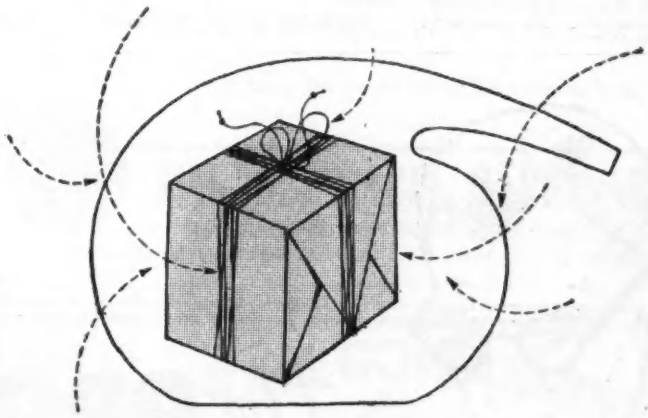

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tures will be practical and that the parameters chosen will meet, to the extent of current knowledge, future needs.

Research-Management Relations

There were two talks on research-management relations. Raymond Stevens of Arthur D. Little, Inc., Cambridge, Mass., told "What Management Expects of Research." Walter J. Hamburger of Fabric Research Laboratories, Boston, indicated "What Research Expects of Management."

After a short discussion of what management does not expect from research—quality control, trouble shooting or minor changes—Mr. Stevens pointed out that management looks upon research as a supplement to its activities in providing imaginative effort toward sound growth and as a responsible source of advice on high-level planning.

Mr. Stevens discussed research personnel with reference to technical background, initiative, alertness, general knowledge of industry and ability to apply known knowledge to industrial problems. He outlined the different roles played by research and management within the business structure. He concluded with a discussion of how much management can wisely spend on research whether the management is large or small and how it can obtain the best possible results from the money spent.

Mr. Hamburger emphasized that while the question of what research expects of management has gotten a lot of attention from research scientists, there has been little expression of their wants on the formal printed page. Drawing on his twelve years of experience in the direction and administration of a consulting research laboratory, the speaker was of the opinion that the beliefs, attitudes and principles of management are significant factors in the achievement of success from research endeavors.

Belief in research by management, he felt, is a fundamental requirement. He went on to discuss such attitudes as imagination, discrimination, tolerance and humility. Mr. Hamberger suggested that management consider research as analogous to insurance, rather than as an investment. Finally, he explored the proper relationship between research achievements and the publicity given them.

Reporting on the "Calculation of HLB Values of Nonionic Surfactants," W. C. Griffin of Atlas Powder Company, Wilmington, Del., pointed out that there is a great number of commercially available surfactants for the cosmetic industry. This multiplicity of products, he stated, often hinders rather than helps the cosmetic chemist in his choice because there is no complete method of classifying surfactants according to behavior.

The HLB system of classifying a surfactant according to the Hydrophile-Lipophile Balance, it was explained, has been proposed as a start for devising such a system. As originally determined, HLB values were calculated from the emulsification results obtained in a large number of comparative tests. The amount of labor involved in obtaining a single value prohibited the determination of a large number of these values, it was stated. Mr. Griffin closed with a discussion of a method of calculating HLB values for most nonionic surfactants and the presentation of the calculated values for a number of products.

Disulfide Linkage

In a talk on the "Chemistry of the Disulfide Linkage," Gerald Oster and Norman A. Rosenthal of Polytechnic Institute of Brooklyn noted that the importance of the function of the disulfide linkage in protein structures is widely appreciated, particularly, they said, in its application to permanent waving.

Nevertheless, it was pointed out, there are conflicting theories regarding the chemical activity of this bond. Aim of the talk was to show the factors operative in disulfide cleavage with illustrations taken from research done by the speakers.

Among the problems discussed were questions of bond strength and disulfide cleavage, effects of pH on the strain of the bond as shown by the ultraviolet spectra, and the detailed mechanism of the disulfide cleavage. These problems were tied in with the practical problem of permanent waving of hair.

Lipstick Manufacture

A. L. Fishbach of Oxzyn Company talked on "Lipsticks—Their Formulation, Manufacture and Analysis." Lipsticks are formulated with an oil base—usually castor oil or its derivatives—to act as a carrier for the insoluble lake colors and a partial solvent for the brominated fluoresceins, it was pointed out. Mixtures of waxes are used as hardeners and to otherwise affect the texture and properties of the stick, it was said.

By varying the proportions of beeswax, ozokerite, candelilla and carnauba waxes, Mr. Fishbach declared, hardness, strength and resistance to temperature changes can be controlled. Lanolin and its derivatives, mineral oil, petroleum and partially hydrogenated vegetable oils are used as emollients. Creaminess, ease of application, etc., are controlled by addition of lower aliphatic and polyol esters of fatty acids.

High strain lipsticks, the speaker continued, use a solvent for the brominated fluoresceins. Propylene and polyethylene glycols, as well as their esters, are most commonly used for this purpose. Coupling agents to keep the dye solvent in solution with the waxy material were advised by Mr. Fishbach. Ricinoleate esters, he stated, are effective for this purpose.

Obtaining Mass, Lip Tones

About 10 percent lake color is used to secure the mass tone and lip tone of the lipsticks, it was explained. About 3 percent of brominated fluorescein are used as lip stains. Colors are mixed with oil and ground through a roller mill. Waxes and other ingredients, the speaker said, are separately melted and added to the color in oil. He went on to show flow sheets of the process. Tests for melting point, and resistance of rupture, heat and humidity were described. Methods for dye and lake content were given.

The final speaker on the cosmetic chemists program was Earl O. Butcher of New York University's department of anatomy. He described "Experiments on the Epidermis of Animals Which May Be of Value to the Cosmetic Industry," demonstrating the effect of several oils, fats and fatty acids on the epidermis by photographs of histological preparations.

Mr. Butcher described the extent of their penetration as shown by fluorescence. Linoleic acid, for instance, was found to penetrate the skin rapidly and showed up ten minutes after the application in the capillaries. Lanolin, it was said, is mainly retained in the outer strata of the epidermis. Radioactive iodinated linoleic acid, the speaker showed by radioautographs, is confined to the epidermis. Much of it is lost as the epidermal cells are shed.

Observations show that a thin epidermis and a dry brittle corneum are associated with a low metablism and fluid content of the skin, he reported. As the metabolism and fluid content increases, he asserted, a thicker epidermis and a definite granulosum appear. Fluid loss from the skin is the least when the epidermis is thin and a brittle corneum exists.

CIBS Award Presented To Sterling Inst. Team

E. T. Hinkel, jr., Dr. M. L. Tainter and Dr. F. C. Nachod of Sterling-Winthrop Research Institute, Rensselaer, N. Y., were presented with a $250 cash award sponsored by the Cosmetic Buyers and Suppliers Association by William S. Fairhurst, CIBS president, at a luncheon of TGA's scientific section, held May 13. The award was made to the best paper in the judgment of the editorial board of the *Proceedings* of the scientific section. CIBS was organized in 1948 as a group representing the younger members of the toilet goods industry.

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Essential Oils, Aromatics, Flavorings

The most notable price change among the essential oils last week was in lemon oil. A major producer reduced his price schedule 75c. per pound early in the week and other producers followed. The overall price decline amounted to 75c. per pound. Italian lemon oil prices were dropped a total of 95c. from previously quoted levels. The decline in the California oil did not come as a complete surprise to the trade. It was noted that the new lemon crop was due in the not too distant future and that additional acreage planted was expected to increase the quantity of fruit available for lemon oil manufacture.

The price cut came as the trade began to move into its peak consumption season. The ultimate effect of the lemon oil price cut upon the orange oil market was not readily apparent last week. There was a slight weakening in spot prices with the low of the range slipping 3c. per pound. The spot market in lime and bergamot oils continued basically unchanged. Bergamot oil has been steady for some time, it was noted.

A perusal of the spot market last week brought out price changes which had been made in several of the small volume oils. Angelica root oil was priced $4 below formerly reported levels, as was oil of calamus root. Canaga oil was down 65c. per pound and coriander oil, 70c. Croton oil was priced $1.80 lower, on spot, and cumin oil was off $1.60 per pound. Canadian fir oil was pegged 30c. lower and was reported to be in a firm position owing to the general sparseness of supplies in recent months. The new crop on this oil was expected to be available starting toward the latter half of June.

The camphoraceous oils continued in very tight supply with white oil of camphor being about the only oil in that group to be available in any quantity. Prices on the other oils in the camphor group were growing increasingly nominal in view of the lack of oil coming from source.

In the flavorings group, price changes were limited generally to the seeds and spices. Activity in this market was noted to be unusually quiet for this time of year. Dutch caraway seed continued to ease, on spot, in face of slow consumer inquiry. Poppy seed was fractionally lower as was clove, ginger, cinnamon and decorticated cassia.

Price Trends

Advanced

Cinnamon, Ceylon, #2, 2c. per lb.
Nutmeg, West Indian, ½c. per lb.

Reduced

Caraway seed, Dutch, ½c. per lb.
Cardamom seed, decorticated, 5c. per lb.
Cassia, Saigon, all medium, 1c. per lb.
Clove, 1c. per lb.
Ginger, African, 1c. per lb.
Nigerian splits, 2c. per lb.
Oil, angelica root, $4 per lb.
Calamus, $4 per lb.
Cananga, 65c. per lb.
Clove, USP, 5c. per lb.
Coriander, 70c. per lb.
Croton, $1.80 per lb.
Cumin, $1.60 per lb.
Fir, Canada, 30c. per lb.
Lemon, USP, Calif., 75c. per lb.
Messina, 95c. per lb.
Rue, 60c. per lb.
Pimento, Jamaica, 1c. per lb.
Poppy seed, ¼c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	May 15, 1953
139.82	147.00	147.90	154.36

(*For Current Prices see page 9*)

Essential Oils

Angelica Root—The spot market was noted to have weakened with the low end of the price range declining $4 per pound. The current range was from $66 to $100 per pound.

Calamus—Spot prices ranged from $12 to $20 on the current market. The lower quotations represented an overall dip of $4 from previous levels.

Camphor—The supply situation continued very tight. Spot supplies of most of the camphoraceous oils were said to be extremely hard to locate. The outlook for the immediate future was for little if any improvement in supply. Prices held very firm with the likelihood that they would become increasingly nominal with the exception of white oil of camphor which was in a more satisfactory supply position.

Cananga — Spot prices were off last week. The low end of the price range was down 65c. per pound from prior reported levels.

Clove—Spot quotations on clove bud oil were slightly easier, declining 5c. The current range was from $3.75 to $4.50 per pound. There were some reports of $3.50 oil in the market but it was thought that USP specifications would not be met by all such material.

Coriander—Prices were off 70c. on coriander oil, on spot. The market in coriander seed has not been strong, of late, an important factor in the lower price of the oil, it was said.

Croton—The market in croton oil continued quiet. Spot quotations were noted to $1.80 per pound less than formerly reported. The current range was from $2.50 to $4.

Cumin—The market in cumin oil was easier. Spot prices were off $1.60 per pound. The current range was $4.15 to $4.30 per pound.

Fir—The supply situation in Canada fir oil was reported to be tight. New crop material was not expected to become available until late next month. In the interim, the spot market was expected to continue firm.

Ginger—The spot market here declined in recent weeks. The low of the market was $2.15 below the previous minimum quotation for spot sale. The current range was from $9.85 to $13.50 per pound. Demand for ginger root from the grinders has been slow and the oil market has correspondingly benefited, it was noted.

Lemon—The market in lemon oil broke last week with Californian lemon oil being reduced to $6.35 to $6.50 per pound. The reduction amounted to 75c. per pound and was the first price change noted in this oil this year. The price break came as little surprise to some observers in view of the approach of the new crop the need to move more of the current lemon oil held in producers hands. The price cut was felt to presage a more liberal supply of lemon oil than has heretofore been available. Increased acreage planted to lemon trees was reportedly a strong factor in the easing of supply, it was said. Italian lemon oil was down a total of 95c. in the spot market. The current range on this oil was from $6.05 to $8.50, depending upon quality and seller.

Ocotea Cymbarum—Spot supplies continued to grow short, with prices holding at 90c. to $1.30. The supply situation in the immediate future was expected to be quite tight in view of the extreme shortage in camphoraceous oils.

Orange—The market continued to weaken. The decline in lemon oil was expected to have a depressing affect upon the spot market although prices should not decline in any amount comparable to the drop in lemon oil, it was said.

California oil was off 3c. from the preceding week, being quoted at 67c. to $1.25 per pound.

Palmarosa—Shipping prices continued to go up at the source with the spot market, as a rule, trailing behind replacement prices. Supplies at origin were low and prices there were higher than spot quotations, here, it was noted.

Petitgrain—The market, both spot and abroad, continued quite firm. Prices on spot held steady at $3 to $3.50 per pound.

Vetiver—There was no change noted in spot quotations. Vetiver Bourbon oil was reported to be stronger for shipment with the spot market firm.

Miscellaneous

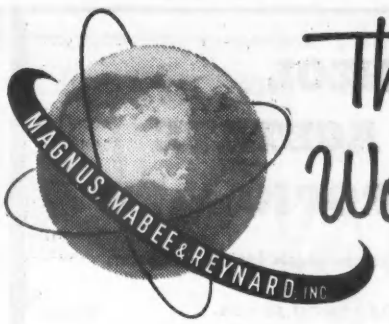
Caraway Seed—The market continued to show weakness in view of the laxity in consumer demand. Spot quotations declined ½c. to 15½c. The overall market forecast, however, was for a strengthening in the market since it was expected that demand would exceed supply in the

Imports Detained by FDA

Week Ended May 7
New York

Arnica flowers, 12 bags: filthy; not arnica flowers.
Black pepper, 5 bags: mixture of molle seed and black pepper.
Cloves, 100 bags: filthy.
Crude drugs (6 lots), 32 bales: filthy.
Capsicums (2 lots), 492 bales: 1 filthy; 1 moldy.
Cassia (14 lots), 1,315 bags: filthy.
Cardamon seed, 53 cases: filthy.
Cumin seed, 400 bags: insects.
Gum Karaya, 123 bags: filthy.
Ginger (5 lots), 400 bags: wormy.
Orange peel (2 lots), 338 bags: wormy.
Oregano, 80 bags: filthy.
Paprika, 125 bags: filthy.

For Late Market Developments, See Page 4



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world market. The current downtrend was said to be temporary in line with a slight seasonal decline in demand.

Cardamom Seed—Decorticated Guatemalan and Alleppey cardamom seed declined 5c. per pound, on spot sales, last week. The current price on these qualities was $1.85.

Cassia—Offerings from source continue light and fully on a par if not slightly higher than spot offerings. Deferred deliveries can still be arranged at very close to the spot price although they are not widely offered. Ceylon Cinnamon is very scarce both here and at source and no relief is in sight before new crop shipments June/July. Saigon, all medium cassia declined 1c., on spot, to 84c.

Cinnamon—Ceylon cinnamon No. 2 advanced 2c., on spot, last week. The current price was 46c. per pound.

Clove—Madagascar and Zanzibar clove declined 1c. per pound. The former was currently quoted at 56c. to 57c., while the latter was pegged at 66c. to 67c.

Ginger—African ginger prices declined 1c. to 25c. to 26c. Jamaica ginger was somewhat easier but prices held unchanged. Nigerian splits declined 2c., on spot, and were quoted at 23c. per pound.

Nutmeg—West Indian nutmeg advanced ½c. on spot and the market was considered to be firm. The current price was 31c.

Pepper—The spot market continued apparently unaffected by the tenseness of the international situation. Prices held unchanged as of late in the week in face of slow grading. The lack of any real vitality in the market poses the question as at what level the market will stabilize. Currently the combined effort of a seasonally poor grinder business and a restriction in forward sales has had a depressing effect upon prices, generally.

It was believed that the historical pattern of price movements will continue with the lows of the year coming during the second quarter period and the highs in the period from August through October. The approach of the Sarawak crop was said to have restricted forward commitments and encouraged the development of a short position abroad. It was rumored that there were good quantities for shipment of the Sarawak crop but sales were not being forced by shippers at the source, it was noted.

Pimento—Jamaica pimento prices declined 1c. on spot and were pegged at 60c. while Mexican pimento was priced at 58c.

Poppy—Poppy seed prices were down, on spot sales, last week. Argentine quality was priced at 16c. while Dutch poppy seed was pegged at 19c. Dutch, Polish and Turkish poppy seed were off ¼c., respectively. The latter tow qualities were quoted at 18c. and 16¼c., respectively.

Turmeric—Shipments of Alleppey will definitely be smaller this year and offerings at the moment are practically unavailable. Madras has been moving for shipment due to the scarcity of Alleppey, but prices are still very reasonable. Only odds and ends of other grades are expected this season.

Vitro Corp. Names Wensch To Atomic Power Project

Vitro Corporation of America has appointed Glen W. Wensch metallurgical engineering representative of the corporation in the atomic power reactor project now under study by twenty-six associated firms, led by Dow Chemical Company and Detroit Edison Company. Dr. Wensch became associated with Vitro in February after serving for two years as chief of the materials branch of the Atomic Energy Commission at the Savannah River operations office in Georgia, and joins Alton P. Donnell of Vitro, who has acted as coordinator for the Dow-Detroit Edison studies, and who recently became project manager for the activity.

Dr. Wensch was for two years staff metallurgist at the Los Alamos Scientific Laboratory in Los Alamos, N. Mex., and later was research metallurgist for Fansteel Metallurgical Corporation, North Chicago, Ill. The combined efforts of the firms of the Dow-Detroit Edison associates are directed toward the research and development of a breeder reactor which, it is believed, holds great possibility for industrial success.

Stanford Research Institute Opens New Division in Pacific Northwest

Stanford Research Institute, Stanford, Calif., has started operations of its new Pacific northwest division with the establishment of an office in Portland, Ore. The institute expects to launch a research program on problems of long range development of power and water resources of the Pacific northwest, working closely with other groups and interests in the area.

Blood Assurance Program Set Up in New York State

A new blood assurance program to insure families and individuals against their need for blood was outlined last week by the non-profit Blood Banks Association of New York State, organized under the auspices of the Medical Society of the State of New York, at a luncheon meeting in the Waldorf-Astoria hotel, New York.

Dr. J. Stanley Kenney, president of the Association and past-president of the State Medical Society, simultaneously announced a blood clearinghouse whereby 100 member New York state blood banks may quickly locate rare types and transfer surplus blood to where it is needed through a system of daily inventory reporting. The clearinghouse is already operating in cooperation with twenty-two banks and is being gradually extended.

Under the blood assurance program, an individual who contributes a pint of blood protects his immediate family for one year to the extent of four pints of blood per family member under age twenty-one. Single individuals with no dependents are assured of unlimited blood.

Naugatuck Moves in N. Y.

The New York area sales office for Naugatuck Chemical Division of United States Rubber Company, has been moved from 254 Fourth avenue to the company's headquarters, 1230 Avenue of the Americas.

Perfumers' Society Meets Wed.

The American Society of Perfumers will hold a regular monthly dinner meeting at the Advertising Club, New York, May 19. Pierre Harang, vice-president of Houbigant, Inc.; vice-president of the Fragrance Foundation and a director of the Toilet Goods Association, will be the speaker.

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CSMA Shapes Midyear Conclave Agenda

—Continued from page 7

Association, on "Product Damage Hazards with Insecticides." The division will also hear Ira P. MacNair, of MacNair-Dorland Company, New York, speak on "Household Insectidices—What's Happened Since 1948?" Dr. Harry L. Haynes, of Carbide & Carbon Chemicals Company, a division of Union Carbide & Carbon Corporation, New York, will deliver a paper on "Cyclethrin—A Readily Synergizable Pyrethrin-Like Insecticide," prepared by Howard R. Guest, Dr. Harry A. Spansburg and Dr. Haynes.

The soap, detergents and sanitary chemicals division, also meeting concurrently, will hear a panel on "Dermatology and Toxicology in Soap and Synthetic Detergent Compositions," with Dr. Louis F. Barail, consulting biochemist and toxicologist, New York, as moderator. "Toxicity of Soaps" will be the subject of a paper by M. H. Faillie, assistant consulting biochemist in Dr. Barail's firm. Dr. Irwin J. Lubowe, medical consultant for clinical evaluation and toxicology, New York, will speak on "Toxicity and Sensitivity of Cosmetics and Cosmetic Bases."

The session will continue with a paper on "The Systemic Toxicity of Synthetic Detergents" by Dr. Francis F. Heyroth, of the College of Medicine of the University of Cincinnati. "Cutaneous Irritant and Sensitizing Effects of Synthetic Detergents" will be the subject of a talk by Dr. Donald J. Birmingham, chief dermatologist of the occupational health field headquarters of the Public Health Service in Cincinnati. Dr. Harold Sutter, Wyandotte Chemicals Company, Wyandotte, Mich., will talk on "Emollients in Detergents," and this session of the division will conclude with a paper on "Toxicology of Antiseptics and Perfumes" by R. E. Vicknd, of Sindar Corporation, New York.

The automotive division, meeting on the afternoon of May 24, will hear R. E. Daley, of Carbide & Carbon Chemicals Company, speak on "Trends in Antifreeze Materials." Dr. C. S. Kimball, of Foster D. Snell, Inc., will talk on "Methods of Testing Radiator Compounds," and William H. Adamson, of Commercial Solvents Corporation, New York, will speak on "Problems of Anti-Freeze Marketing." The final paper to be heard by the automotive division at this session will be on "Preventive Maintenance in Automotive Cooling Systems," by J. J. Traviesis, of the United Motors Service division of General Motors Corporation, Detroit, Mich.

The waxes and floor finishes division will meet concurrently and will hear a paper on "The Use of Polystyrene Type Latices in Self-Polishing Floor Waxes" by Lloyd H. Perry and Robert S. Sweet, Union Bay State Chemical Company, Cambridge, Mass. "Testing Floor Finishes" will be the subject of a paper to be delivered by Mr. Perry. A paper prepared by E. R. Blair, G. E. Curtis and L. E. Kneeland, of American Can Company, New York, on "Evaluation of Metal Containers for Chemical Specialities Products," will be delivered by Mr. Kneeland. Edward A. Wilder will talk on "The Application of Chromatographic Technic to the Determination of the Hydrocarbon Content of Carnauba and Ouricuri."

Luncheon Session Planned

The luncheon speaker on May 25 will be J. M. Clapp, assistant to the president of United Airlines, who will talk on "The Use of the Airline Facilities in the Chemical Specialities Industry." During the afternoon, the aerosol division will hear R. A. Fulton, of the Agricultural Research Service's research branch, Beltsville, Md., discuss "Test Procedures for Aerosol Production." He will be followed by Montfort A. Johnson, of Continental Filling Corporation, Danville, Ill., talking on "Pressure Filling of Glass Aerosols." "The Industries Safety Record to Date" will be the topic of J. F. Brandenburg, of Standard Oil Company (Indiana), Chicago. Joseph C. Pizzurro, of Precision Valve Corporation, Yonkers, N. Y., will report on "Aerosol Filling Safety." The final talk in this session of this division will be given by Willard A. Pleuthner, of Batten, Barton, Durstine & Osborn, New York, on "Marketing Aerosols."

The insecticide division, at a meeting running concurrently, will hear George A. McLaughlin, of McLaughlin Gormley King Company, Minneapolis, Minn., tell of "New Trends in Household Insecticides." He will be followed by Dr. G. W. Fiero, of Esso Standard Oil Company, New York, speaking on "Insecticide Survey of 1953." Dr. Frank Princi of the University of Cincinnati will report on "DDT Toxicity—Up to Date." "Toward Cleaner Food," by Walter W. Dykstra of the Fish and Wildlife Service of the Department of the Interior, will be the final paper to be heard at this session of the division.

A joint session of the automotive division and the soap, detergents and sanitary chemical products division will be held on the afternoon of May 24. D. F. Stauffer, Hercules Powder Company, Wilmington, Del., will speak on "Corrosion Inhibitors for Hydrochloric Acid Cleaning Compounds." Stanley W. Caryell, of R. M. Hollingshead Corporation, Camden, N. J., will report on "Chemical Specialities for Automotive Use." He will be followed by Jay C. Harris, Monsanto Chemical Company, St. Louis, Mo., presenting a "Report on Soap, Detergents and Sanitary Chemical Products Scientific Committee."

The disinfectant and sanitizers division will hold a concurrent session to hear "Use Dilution Tests vs. Phenol Coefficient Testing" by R. R. Egan, A. G. Bowers, David Imhof and Alice Zuern, Gerson-Stewart Corporation, Cleveland, Ohio. They will be followed by a report on "Detergent Residues and Their Effect on Disinfectant Processes," by L. F. Ortenzio, R. L. Caswell, J. L. Friedl and L. S. Stuart, of the Agricultural Research Service of the Department of Agriculture.

Chesebrough Names Straka To High Executive Position

Jerome A. Straka, former executive vice-president of the Colgate-Palmolive Company, Jersey City, N. J., has been elected director and executive vice-president of Chesebrough Manufacturing Company, Cons'd, New York.

Mr. Straka started his business career with Palmolive Company in Milwaukee, Wis., in 1924. With the exception of two years when he was executive vice-president of Yardley of London, Inc., he was with the Colgate-Palmolive organization until he resigned in 1953. During his years with Colgate-Palmolive, Mr. Straka held official positions in various divisions of the firm, including its foreign department. He became a director in 1949.

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Industrial Organic Chemicals

Crude glycerine prices continued to show a firm tone due to scarcity of supplies. Current prices for soaplye and saponification material were up a cent. Methyl acetone schedules have been reduced. Otherwise, organics were relatively stable in price last week. No changes were reported among the alcohols.

Some talk in the trade of price cuts for alcohol failed to materialize in a change. Producers indicated that the volume of movement, and ethyl alcohol's already low schedule, would indicate prices were more likely to go up than down. Acetic acid showed a pick-up in demand from textiles this month. Competition in several areas is still keen. Acetone has stabilized itself at its present position. The volume of movement was considered fairly good. Production capacity was in excess of total demand in the market, at present.

The markets for glycols have shown some improvement in recent weeks. Sales were not as slow as they had been, but still were not as good as producers would like to see. These conditions also held true for dipropylene glycol, triethylene glycol, and tripropylene glycol. Demand for ethyl acetate was relatively good, although not quite up to previous levels due to competition with other materials. Nevertheless, sources were able to move all their output without difficulty. Formaldehyde moved well to various outlets. Demand for gluconic acid was very good. Sales of refined glycerine held up well. But, some producers could handle more business. Isobutyl alcohol moved very well. Demand for methanol from the antifreeze trade was good. Producers were moving all production, it was said.

Nitroethane was still in short supply for chemical raw material use. More production was expected next year to relieve the situation. Oxalic acid was readily available. Competition of other polyols with pentaerythritol has reduced overall volume for PE, but a little improvement in demand has been noted in recent weeks, it was said.

Acetic Acid—Trade sources reported demand for glacial has picked up quite a bit this month. Supplies were still ample to handle the current demand. However, competition in New England, New York, and the mid-west is still keen, it was said.

Acetone—A fairly good sales volume continued to hold the market in a firm position, pricewise. Most of current output moved readily without any difficulties. Some output, from which acetone is a by-product, is available and more production of that sort is due to come into the market soon. Hence, total production capacity in the market is expected to be more than adequate to handle the demand.

As overall competition in the market grew keener, price cuts were likely to result in the long run, it was felt. The beginnings, perhaps, were seen a few weeks ago when schedules were reduced ½c. to the 8c. tankcar level. However, quotations were firm at that level now, and no further action was expected immediately. One source pointed out that not all of the acetone which will come from new phenol plants will increase competitive conditions for the ketone. First, geographic location, with consequent freight costs would take up part of the cost-price differential. Second, some of the new acetone production will remain captive for use in other processes, it was felt. Thus, all of the material won't get on the market. Nonetheless, its effect on the market cannot be completely minimized, and some acetone producers feel that the output from new directions will seek a price level compatible with its cost and market value.

Alcohol—No changes in price schedules were reported in this market last week. Some rumors had circulated in the early part of the week about a reduction, but that failed to materialize. Further, a few producers suggested that the market was more likely to go the other way. It was felt that prices have already been cut down as low as is economic and lower quotations would mean little in sales volume, aside from the fact that it would mean shaving a very narrow profit margin even further. Producers also stated that the volume of movement has held up very well. Several sources said that they were doing good business in alcohol. Ample production was available to take care of current consumption needs.

Dipropylene Glycol—Producers said that the glycol markets were considered fairly good. Sales volume was not as good as they would like to see. Nevertheless, buying interest was a little better than it had been. Prices were firm and unchanged at previously established levels.

Current quotations were at 13¼c. per pound in tankcars, 15c. per pound in carlots of drums, and 16c. per pound for less than carlots, all on a freight allowed basis.

Ethyl Acetate—No change was reported for the market. Demand was relatively good. Suppliers were moving all of their output without difficulty. The volume was not quite as large as it had been formerly, due to competition from ketones, it was said. However, uses such as in extractions and other chemical uses were places where this ester was in a firm position and not losing any demand to other products, a source added. Many consumers still preferred ethyl acetate in their formulations. Present schedules were unchanged and firm at previous quotations.

Formaldehyde—A well sustained demand from diverse interests was keeping activity for this chemical going. Demand was not considered heavy, but business was satisfactory. No price changes have taken place or were contemplated.

Gluconic Acid—Production has been moving along steadily to meet a very good demand. It was said that the acid's many applications were sustaining sales activity. Prices were firm at previously established listings, drum quotations being at 15½c. per pound. Supplies were adequate for immediate needs.

Glycerine—Domestic buyers held that the 19c. crude price was more logical based on what refined was selling for however, firmness in the market due to a real shortage of crude has pushed the price up to 20c. for most trading. It was added, that many of the large domestic buyers were holding off, being well fixed for their immediate needs. Nonetheless the premium could be demanded if a tankcar was ready to roll quickly, it was said. With soaplye at 20c., saponification material became 22c. per pound last week. There was still very little crude to offer at those prices, due to heavy world demand.

Sales of refined material were going relatively well. Demand was not as strong as some producers would like to see, but several producers reported they were maintaining a good volume. Refined prices were unchanged and considered firm at their position.

Glycerine stocks at the beginning of March totaled 63,004,000 pounds, compared with 62,603,000 pounds at the beginning of February, according to figures from the Association of American Soap and Glycerine Producers, Inc. March production of crude amounted to 20,120,000 pounds, as against 18,511,000 pounds in February. Cumulative output of crude for the period of January through March totaled 57,376,000 pounds, against 56,860,000 pounds produced in the same period last year. Reduced importation of glycerin was shown by March figures. Imports that month totaled 972,000 pounds, compared with 1,394,000 pounds in February, and 4,832,000 pounds in March, 1953. The calendar total for the first three months of this year ran to 3,129,000 pounds imported, while 12,861,000 pounds were

Price Trends

Advanced

Glycerine, nat., crude, saponification 88%, 1c. per lb.
soaplye, 80%, 1c. per lb.

Reduced

Methyl acetone, synth., 9½c. per gal.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month
132.07	132.29	132.41

(*For Current Prices see page 9*)

This market reports on industrial aliphatic organic chemicals. Reports on industrial aromatic organics may be found in the coal chemicals market, while reports on fine and rare organic chemicals appear in the drugs, fine chemicals, botanicals market.

For Late Market Developments, See Page 4

brought in during the corresponding period of last year.

Isobutyl Alcohol—Producers reported material was moving very well. Demand was quite satisfactory. And prices were firm at previous listings. Stocks were adequate to handle consumer requirements.

Methanol—A well sustained demand kept activity in this market going at a good pace. A good volume has been moving to antifreeze business for the new season. Prices of methanol have remained steady at previous schedules. Adequate supplies were available to handle the call.

Methyl Acetate—Price schedules of synthetic material were dropped 9½c. to a level of 45c. per gallon in tankcars. Carlots of drums became 57c. per gallon, and less than carlots were 63c. per gallon. Quotations were on the basis of f.o.b. at the nearest shipping point. No revisions of natural material have been reported yet. A producer said that there was practically no natural methyl acetone available at present.

Nitroethane—The market continued to run in short supply. Demand from outlets which used it as a raw material has been heavier than production capacity can handle currently. No significant change in the situation was anticipated until next year, when new production will come in. Price schedules were firm and unchanged.

Oxalic Acid—The market was reported in free supply, with carlot and trucklot shipments readily available. Producers said that demand was spotty. Prices held firm at previous quotations.

Paraformaldehyde—One producer said that this market was doing very well, while another said demand could be better. Material was moving nicely to satisfy demand. Prices were firm and unchanged. Supplies were sufficient to take care of current consumer needs.

Pentaerythritol—Activity in the market was slower due to competition with glycerine. However, there were uses in certain resins which were particularly adapted to PE not likely to be involved in any switches because of lower cost inducements, it was said. Therefore, demand from those synthetics was consistent with activity of the resins in general. Current activity for the paint industry has resulted in a relatively good, and fairly steady demand from synthetic resins. There has been a gradual improvement. Where buying interest for PE had been a bit slow, there has been an increase in the number of calls in recent weeks. Ample supplies were available for consumption. Prices were firm.

Triethylene Glycol—Material was being offered on the basis of a 16½c. tankcar price. Producers said that there has been no change in the market. Sales were fairly good. Demand was not as strong as it had been at other times. But buying interest has improved enough to bring fair business. Supplies were ample to accommodate consumer requirements.

Tripropylene Glycol—Sales volume of this item is small, compared with some of the other glycols. Ample supplies were available for consumption needs. Current schedules were at 18¼c. per pound in carlots, and 19¼c. per pound in l.c.l. quantities. Prices west of Arizona, Idaho and Utah were 1c. per pound higher.

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Coal Chemicals

Coaltar chemical prices remained firm. Ample supplies of virtually every item were available to handle the demand. In some instances, oversupplies have been a problem. However, reduced steel operations through the first four months of this year have cut production levels enough to even tighten up one or two markets which had been long in the late months of last year.

Benzol was the prime example of this situation. Producer inventories have been reduced to the extent that current low light oil output was not sufficient to meet all consumer needs at every shipping point. Picked up buying interest has come from phenol, insecticides, and styrene. Part of the purchases were still felt to be buying to maintain inventory positions. Xylol strength has held up well. A fairly general tight supply existed for coaltar material. Low production not only kept xylol tight, but also has begun to show some shortage of toluol in the larger consuming areas.

Steady business for tar acids moved cresols and cresylic acid at an even pace. Imported cresylic acid sold at similar levels. Well defined outlets kept material moving to the same channels. Natural phenol moved along with tar acid demand. A gradual improvement has been noted for USP and natural grades as demand from phenolic resins and adhesives built up. However, more volume could be handled with current supplies and unused capacity. Crude naphthalene was firmer in the domestic market.

Phthalic anhydride sales were relatively good, but were not up to capacity. Alkyd resin demand was a little spotty due to slowness in industrial finishes. There was little demand for aminoazotoluene. Aniline was slightly improved, but the volume was not up to former levels yet. Supplies of o-dichlorobenzene were better. Monochlorobenzene demand was still relatively slow. Some buying of dinitrotoluene and m-tolylenediamine has come from isocyanates and dyestuffs.

Estimated production for the week ending May 16 was scheduled to be at 68.6 percent of theoretical capacity for the steel industry, or an index rating of 101.8, according to the American Iron and Steel Institute. This was equivalent to 1,636,000 tons, as against 1,622,000 tons one month ago, and 2,262,000 tons one year ago.

Benzol—Light oil producers have been a good deal more optimistic about the strength of this market in the past several weeks. A generally picked up demand has kept most of the present output moving very quickly. Low cokeoven operations have cut aromatic output enough for a little tightness to begin to show in some quarters. The sizable inventories held four or five months ago have been drastically reduced. Some consumers were buying now to maintain their present inventory position, others were buying to fill consumption needs. All talk of lower priced benzol has disappeared. The question is now, "Will there be enough 40-cent coaltar benzol obtainable to satisfy the market?" Of course, much depends upon operating rates in the steel industry. At present rates, it appears that there will be a little tightening in the supply position of coaltar benzol.

Cokeoven operators produced a total of 12,427,861 gallons of specification and industrial grades, excluding motor benzol, in March, while February output had been 11,895,422 gallons, and March, 1953, production was 15,997,186 gallons, Bureau of Mines figures relate. Total output of these grades in the first three months was 37,883,907 gallons, whereas it was 46,612,666 gallons in the corresponding period of last year.

In addition, cokeoven production of motor grade totaled 729,466 gallons in March and 285,219 gallons in February, bringing the three month total up to 1,288,557 gallons.

Coaltar—Total cokeoven production of crude in March was 61,681,960 gallons, compared with 57,661,805 gallons produced in February, and 70,307,689 gallons in March, 1953, Bureau of Mines statistics show. The calendar total for the January-March period was 186,234,921 gallons, while output in the corresponding period of 1953 was 202,262,201 gallons.

The report shows that 15,446,248 gallons of tar were distilled or topped in March of this year, while 5,548,652 gallons were burned as fuel, and 3,997,142 gallons were used otherwise.

Creosote—There has been no significant change in this market in recent weeks. Demand was still spotty, some sources noting a little improvement in the past several weeks and some producers reporting not too much change. Ample stocks were available for current consumption needs. Quotations were firm at the 22c. crude level.

Cresols—Demand for tar acids was steady at a good level. Buying from cresylic resins has been at an even rate. Sustained interest from tricresyl phosphate has been noted. It was said that there were still occasions when all of the demand for the phosphate could not be met. Demand for o-cresol continued to be a bit slow; but there was some movement for that isomer. No price revisions were anticipated for the cresols.

Cresylic Acid—A steady demand has been maintained for cresylic, domestic producers said. Material moved at an even rate to the same outlets that have been consuming the tar acids right along. Prices were firm at previously established listings.

Importers said that they were still moving ADF acid at the same pace. The volume was static, although it was not a bad market. Consuming channels were well defined and sales were consistent to the same outlets, it was added. No change was anticipated in the stable 75c. per gallon quotation for large drum lots.

Naphthalene—Domestic producers continued to view a firmer market for crude material. A steady sales volume for phthalic anhydride production and a smaller but consistent demand for naphthalene derived intermediates has kept production moving. Lower output of coal chemicals due to reduced coking operations has also done much to firm up the picture. The market for domestic crude was also firmer because of the stronger appearance of imported hot-pressed naphthalene.

Importers said that there was virtually no change in the market for 78-degree. There have been practically no unsolicited offers from European suppliers, most of them being in a soldup position through the first half of this year and some extending into the third quarter. When an offer was sought, 4½c. per pound was still the price; but foreign producers were not selling much material in this market at that figure. With domestic material at 5c. per pound, a price over 4c. per pound for imported naphthalene was considered high, it was said. Handling and freight costs made domestic material look all the more attractive, the source added.

March production of crude naphthalene, by cokeoven operators only, totaled 9,296,123 pounds, compared with February output of 7,180,086 pounds, and March, 1953, production of 11,346,588 pounds according to Bureau of Mines figures.

The cumulative total for the calendar period from January through March amounted to 24,282,074 pounds this year, whereas production of crude in the same period last year totaled 32,736,706 pounds.

Phenol—Demand from phenolic resins

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 15, 1953
114.56	114.56	114.56	114.12

(*For Current Prices see page* 9)

Production Estimate

Estimated output of coal chemicals recovered from cokeoven operations during the week ending May 16, was as follows:—

Ammonia liquid, NH_3	lbs.	764,775
Ammonium sulfate	lbs.	27,641,126
Benzol	gals.	2,643,935
Coaltar	gals.	12,127,139
Creosote oil	gals.	677,372
Naphthalene, crude	lbs.	1,868,235
Pyridine, refined	lbs.	19,666
Toluol	gals.	520,047
Xylol	gals.	138,752

For Late Market Developments, See Page 4

and adhesives was fairly steady. The market was by no means considered weak, although it has been stronger in the past. Sales were looked at as being fair, when viewed in light of general business activity. A little firmer tone has been noted for many chemicals as a gradual improvement took root. However, there has been no real surge in buying for any specific items. Business has been steady and reasonably good, with room for more improvement.

The number of calls for USP phenol picked up moderately as spring paint activity grew. Technical grades were a little slower to improve, but increased demand was noted. Ample supplies of all grades of phenol were available to satisfy present consumption requirements. No revisions in quotations were anticipated.

Pyridine—Output of refined 2-degree material in March totaled 5,140 pounds, 5.9 percent below February's 21,357 pounds, according to the Bureau of Mines report. In comparison, March, 1953, output by cokeoven operators amounted to 35,903 pounds. Cumulative production for the calendar year (January through March) was 80,897 pounds, compared with 128,333 pounds produced in the similar period in 1953.

Production of crude tar bases (on a dry basis) in March came to 23,141 gallons, as against 29,258 gallons produced in February, and 53,349 gallons turned out in March, 1953. Total production of crude tar bases in the first three months was 71,382 gallons, whereas output in the same period last year totaled 145,585 gallons.

Toluol—Low coking operations have held light oil production so low that there was some tightness in the market for coal-tar toluol, particularly in the larger consuming areas. More material was available than could be sold in other districts, it was said. Petroleum derived stock was available to fill any tight spots left by coaltar material in the stronger districts. Price quotations held firm at previously established listings. No revisions were anticipated in current price levels.

Cokeoven operators produced 2,812,261 gallons of toluol in March, of which 2,077,144 gallons were 1-degree nitration material and 664,259 gallons were industrial pure (2°), according to the Bureau of Mines, in comparison, February total production was 2,686,940 gallons, and March, 1953, output was 3,109,817 gallons.

During the calendar year thus far (March), output has amounted to 8,484,826 gallons, while it was 8,968,836 gallons in the similar period of 1953.

Xylol—Current production moved right out to take care of incoming orders. Producers said a sustained demand for this aromatic has kept the market in a firm position. The fact that demand was running a little ahead or supplies was partially explained by the reduced operations in coking. A well sustained solvent demand from industrial finishes, alkyd resins and plasticizers did the rest to strengthen the xylol market. Prices were unchanged and steady.

Total production of all grades of xylol by cokeoven operators in March was 867,388 gallons, as against 779,646 gallons in February, and 862,374 gallons in March, 1953, Bureau of Mines figures show. The running total for the three month period from January through March was 2,470,448 gallons, whereas output in the same period last year was 2,484,909 gallons.

Intermediates

Aminoazotoluene—No changes were seen in this market. Demand has been quite slow and showed no sign of a pickup. Prices were firm and unaltered. Adequate supplies were available to satisfy demand.

Aniline—Producers reported a slightly improved demand from textiles and rubber industry uses. However, volume was well below levels needed when the synthetic rubber program was running full sale. Producers were able to handle a larger buying interest than there is at present. Prices were firm and showed no sign of changing.

Chlorinated Benzenes — An increased demand for p-dichlorobenzene for the moth control season has allowed for greater production of both o-dichlorobenzene and para. Hence, whatever tightness there was in the ortho market, has now been alleviated. There was no shortage of this isomer, nor have supplies gotten long. Monochlorobenzene demand was spotty. Some sources reported that they have not received any pickup in interest due to the insecticide activity and export demand. The explanation there was that most insecticide producers have their own captive mono production. Price schedules for all the chlorinated hydrocarbons were steady and firm at previous quotations.

Dinitrotoluene — Demand was approximately at the same level that it has been for quote a while. There was a little interest from isocyanates and a small amount of buying from dyestuffs, it was said. Firm prices held to old schedules. Supplies were good.

a-Naphthol—There has been no pickup in the volume of movement for this intermediate. Business was fairly slow in what was described as a weak market. Prices were unchanged. Supplies were adequate for the call.

a-Naphthylamine — Sales were considered fairly satisfactory. Demand could be stronger, but material was moving. Prices were firm. Stocks were ample for consumer needs.

Phthalic Anhydride — No significant changes were noted in the market. A fair volume of orders were still coming in, producers said. However, demand was well below production capacity. Sales for alkyd resins and plasticizers were not quite as strong as they could be; but they averaged out at a relatively satisfactory pace for phthalic.

Alkyds moved well to paint outlets which took care of trade sales, but demand from industrial finishes used on cars and home appliances was not up to what had been expected earlier in the year. Quotations of phthalic were firm and showed no inclination towards change.

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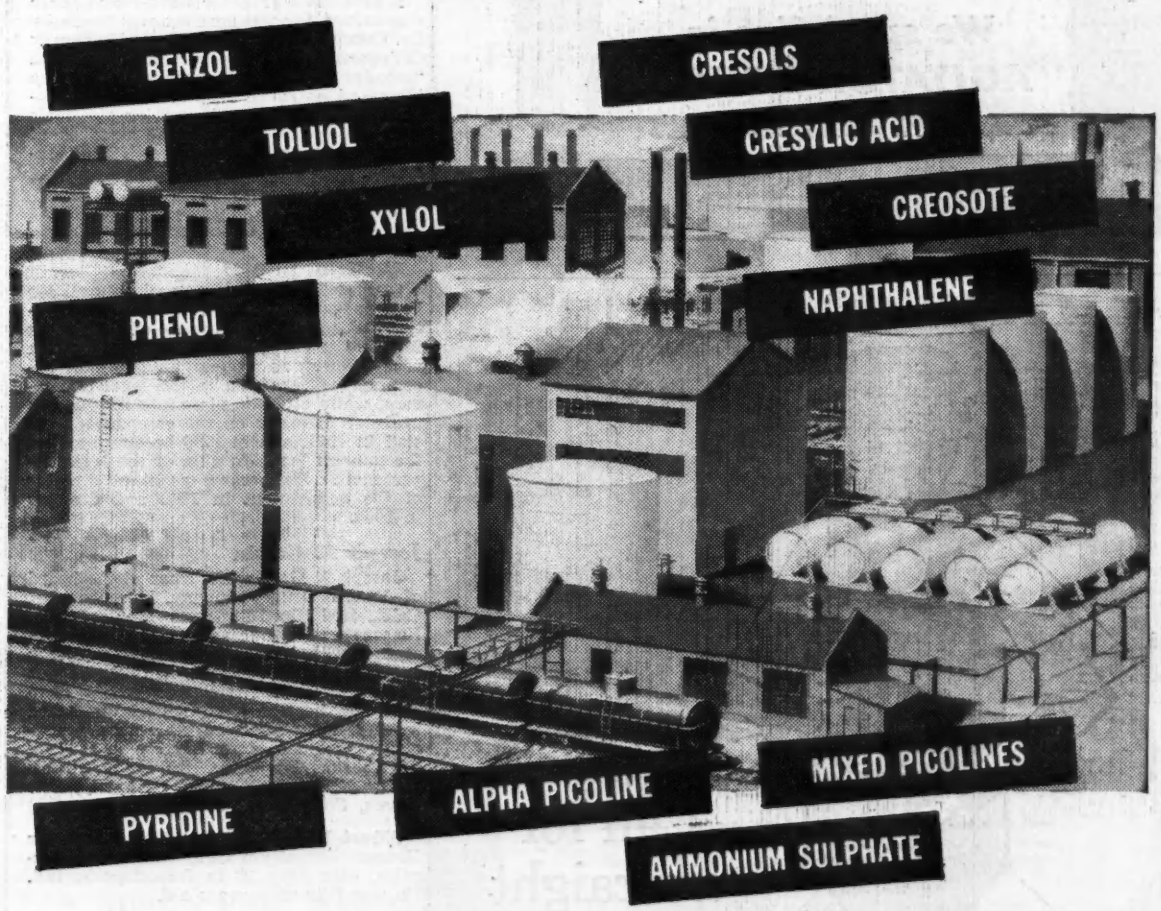

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Drug Economics, Education Problems Aired at Rutgers

Drug store economics and pharmaceutical education were viewed critically by speakers before 500 industry and profession representatives at the third annual Rutgers Pharmaceutical Conference held May 12 at the New Jersey State University, New Brunswick, N.J.

"The retail drug industry in all of its facets is a rough picture...," Ade Schumacher, president of the Liggett Drug Company declared. Among nine reasons given for this condition were "the supermarket is challenging us severely" and discount houses, "a $5,000,000,000 rambling cancerous insidious business which thinks that cheapness is a medal of honor."

For the future, "the drive-in shopping center drug store and...the drug store incorporated with and part of a super market" will come and will be big, the Liggett Company president predicted.

Robert F. Miller, manager of the prescription ware division of the Owens-Illinois Company, urged, "Pharmacy must sell and continue to sell pharmacy itself." He warned that "...Mr. and Mrs. Consumer will not pull back or retrench in 1954 if you, the retail pharmacist, can intrigue him with your prices, imagination, flexibility, and displays changed frequently."

Key Drug Promotion Point Stressed

However, Prof. Sol A. Herzog of Columbia University College of Pharmacy pointed out that it is "a great fallacy that drugs and medicines are as suitable as a proper subject for promotion and pushing as are potatoes or apples, ribbons or underwear..."

Prof. Herzog noted that all drugs and medicines contain powerful and potentially dangerous agents. "The essential point to be driven home to the public is that the pharmacist not only knows in advance of these limitations upon the handling and dispensing of articles of this sort; he is...immediately notified when a situation is discovered to be dangerous.

"The real reason for unrestricted sale of medicines is to get more money for their sale. That can be done only by straight commercial promotion, use of 'specials' and other pressure devices. That can only be done at the expense of the public's health," Prof. Herzog added.

A proposal calling for a five-year college curriculum for pharmacists was made by Dr. George L. Webster, Illinois University College of Pharmacy professor, who stated, "broader educational experience, and the increased entrance requirements for colleges of pharmacy will provide the tools with which the services and rewards of pharmacy as a profession will both increase."

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Obituaries

Stanley L. Abrams

Stanley L. Abrams, general counsel for E. I. duPont de Nemours & Co., Wilmington, Del., died May 8 in that city. He was fifty-five years old. Mr. Abrams began with the firm as a stenographer, later becoming tax specialist in the legal department while attending law school. He was made an attorney on the company's legal staff in 1931, and in 1936 became head of the general legal division of the legal department. He became assistant director of the department in 1940 and director in 1950.

Joseph A. Galvin

Joseph A. Galvin, chairman of the board of Rexall Drug Company, Los Angeles, Calif., died May 10 in Santa Monica, Calif. He was seventy-one years old. Mr. Galvin started with the company forty-six years ago and became treasurer in 1920. He was vice-president and treasurer from 1925 to 1929 and became chairman of the board in 1943. Mr. Galvin was at one time associated with Louis K. Liggett in a drug distribution enterprise. He was also a director of Seamless Rubber Company, New Haven, Conn.

Albert F. Bach, racing fuel expert for General Petroleum Corporation, Los Angeles, died May 10 in Indianapolis, Ind. He was fifty-nine years old.

Alfred H. Bowles, an accountant for Merck & Co., Rahway, N. J., died May 10 in Fanwood, N. J. He was sixty-one years old.

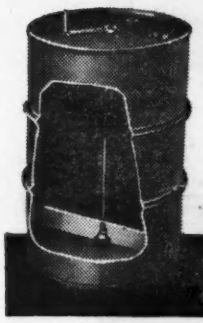
C. Graham McCloskey, former president of the New Jersey State Board of Pharmacy, died May 9 in Newton, N. J. He was fifty-seven years old.

Walter T. Spaeth, contracting representative for Universal Match Company, St. Louis, Mo., died May 10 in that city. He was thirty-nine years old. Mr. Spaeth had formerly been an engineer and chemist for British Petroleum Company in Trinidad and Iran.

David Todd Vance, founder of Tar Heel Mica Company and D. T. Vance Mica Mill, Plumtree, N. C., died May 10 in Asheville, N. C. He was eighty-two years old.

Smith, Kline & French Subsidiary Names V.P.

Richard Pfizenmaier has been named vice-president of Smith, Kline & French International Company, a subsidiary of Smith, Kline & French Laboratories, Philadelphia. Mr. Pfizenmaier was formerly SK&F International Company's sales manager. After joining Smith, Kline & French in 1945 to organize a market research and planning department for the firm's export division, Mr. Pfizenmaier became a resident of Canada to act as sales manager and coordinator between SK&F and its manufacturing and distributing agents in 1948. Two years later, when the company opened a branch plant in Canada, he was appointed general manager. In 1951, he returned to Philadelphia to become sales manager for Smith, Kline & French International Company.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Textile and Leather Chemicals

While trading in textile and leather chemicals continued restricted to small lots for prompt needs last week, total sales aggregated fair sized volume. Prices were quotably unchanged and the market displayed a steady tone, with the exception of egg derivatives due to the easy egg market and old crop tapioca flour for shipment from Brazil.

Offers of old crop Brazilian flour at price concessions attracted little buying interest as importers preferred to await further developments in new crop flour. Trading in tapioca flour for spot needs was confined to Siamese and Java grades due to lower cost than the Brazilian. Demand for potato starch was limited to spot delivery while interest in carlots for shipment from mills was quiet. Market, however, remained steady due to light production. Corn starch and dextrin moved steadily against orders, with new business reported light. Sago flour was quiet on spot and for shipment from producting centers.

Trading in tanning material replacements continued restricted to nearby shipment, as tanners kept inventories low. Prices for all materials were unchanged, despite liberal offers for shipment.

Department of Agriculture sold 13,900,000 pounds of wool between May, 1953, and April 30, 1954, during which time more than 100,000,000 pounds of wool were acquired under the 1952 support program, according to the Boston office of the Commodity Stabilization Service. As of April 30, 1954, Commodity Credit Corporation holdings of wool acquired in May, 1953, under the 1952 support program were as follows:—Pulled, scoured, 2,578,416 pounds and grease, 3,704,850 pounds; shorn, scoured, 848,883 pounds and grease, 79,629,171 pounds, totaling 86,761,320 pounds.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 15, 1953
95.64	95.64	95.24	101.17

(For Current Prices see page 9)

Chemicals

Bichromates—Demand for spot delivery was reported fairly active for small lots. Withdrawals against current contracts continued to move in good volume. Stocks were ample for all grades. Prices were unchanged and steady.

Sodium Acetate—Consumers limited purchases to actual requirements. Prices were without change.

Sodium Hydrosulfite — Consumers continued to limit purchases to prompt requirements. Supplies were adequate and maintained at former quotations.

Sulfonated Oils—Hand to mouth buying was noted for all varieties. Prices were well held at former levels.

Sizing Materials

Albumin Blood—Business was light and spotty for immediate delivery. Stocks were ample. Prices were without change, ranging from 65c. to 80c. per pound, according to quantity.

Corn Dextrin — Consumers absorbed moderate quantities for prompt delivery. Prices were well held for all grades. Gum was quoted at $8.95 per 100 pounds, paper bags, carlots, New York delivery; canary, $8.69; dark, $8.79, and white, $8.53, same basis. Less carlots were 15c. per 100 pounds more.

Corn Starch—Buying interest was fair, with most sales limited to immediate needs. Market was steady and quotably unchanged. Pearl was held at $7.14 per 100 pounds, carlots, New York delivery, and powder $7.25, same basis. Less carlots were 15c. higher. Visible corn supply was slightly lower, declining 600,000 bushels to 19,161,000 bushels for the week ended May 7, against 25,635,000 bushels for the same time last year, according to the Chicago Board of Trade.

Corn growers put nearly 35,000,000 bushels of the 1953 chop under price support in the month ended April 15, the Agriculture Department reported. This brought the amount to 366,453,045 bushels, compared with 306,147,338 bushels of 1952 corn put under support by mid-April, 1953. Corn was the only one of eight grains showing any increase under supports during the month. Price support for the other crops had already expired, while support on corn will be available through the rest of this month.

Egg Albumin—Consuming demand was confined to small lots for immediate needs. Prices were unchanged, but unsettled by the weakness in shell eggs. Flake was quoted at $1.69 to $1.73 per pound and powder, $1.73 to $1.75 per pound, depending upon quantity and seller. Demand for technical was quiet. Prices were maintained at 93c. to 96c. per pound, as to quantity. Egg production in April totaled 6,271,000,000, compared with 6,605,000,000 in March and 6,058,000,000 in April last year. Total output for January-April inclusive amounted to 23,800,000,000 compared with 23,060,000,000 during the same period last year. The 1943-52 average was 22,494,000,000.

Egg Yolk—Business was limited to immediate requirements. Prices were unchanged, ranging from $1.12 to $1.14 per pound, according to quantity.

Potato Starch — Trading was reported slow. Prices remained unchanged and steady. Carlots were held at 6¼c. per pound, mills, f.o.b. Maine with Idaho starch maintained at 6.30c. per pound, f.o.b. mills, and 50c. less for shipment to eastern destinations. Fair demand was noted for spot stocks. Prices were unchanged at 7¾c. to 8¼c. per pound, exwarehouse, depending upon quantity.

Tapioca Flour — Buying interest was light and restricted to spot stocks. Siamese flour of good quality was unchanged at 7½c. to 7¾c. per pound, exwarehouse, as to quantity; Java AAA, 7¼c. to 7¾c. per pound and AA, 7c. to 7½c., same basis. Offers of old crop for shipment from Brazil were freer on the basis of 9¾c. to 10c. per pound, carlots, exdock, while the spot market remained nominal at 13c. to 14½c. per pound, according to quantity.

Tanning Materials

Leather and footwear industries in the Union of South Africa, encouraged by the uptrend in hide and skin production and the steadiness and improvement of the market in 1953, consider the outlook for 1954 bright. Shoe factories and tanneries are working at full capacity, and domestic supplies are plentiful. Anticipating further improvement in the production and marketing of hides, skins, leathers, and leather manufactures, the industry hopes the government will make more imported materials available. Hide and skin consumption in 1953 was estimated at 1,600,000 cattle hides, 400,000 goatskins, 375,000 sheepskins, and about 26,000 calfskins. Comparable 1952 data were 1,400,000 cattle hides, 350,000 goatskins, 300,000 sheepskins, and 24,000 calfskins.

Chestnut Extract—Business was reported fair, chiefly for prompt delivery. Ample supplies were quotably unchanged. Liquid 25 percent tannin was quoted at 4¼c. per pound, tankcars, f.o.b. works; 5.10c. per pound, barrels, carlots, and 5.43c. barrels, less carlots, powdered, 10.92c. per pound, bags, carlots, and 11.65c., bags, less carlots, same basis.

Cutch—Trading was spotty. Shipments were well held at 8½c. per pound, exdock, plus duty.

Mangrove Bark—Consuming inquiry was fair, with occasional sales confined to prompt shipment. Prices were without change. African bark was quoted at $69 per ton exdock; Ecuadorian, $55 per ton, and Colombian, $58 to $59 per ton, same basis.

Quebracho Extract—Business lacked volume. Occasional sales were limited to prompt shipment. Prices were maintained at former levels. Solid ordinary was held at 11 31/64c. and clarified 12 3/16c. per pound, ex-dock, plus duty.

Valonia—Trading was reported inactive. Shipments were quotably unchanged. Beards were quoted at $65 per ton, exdock, and cups, $49 to $50 per ton, same basis. Extract ranged from 9c. to 9¼c. per pound, exdock, plus duty, as to quality.

Wattle—All grades were offered freely at prevailing prices. Buying interest was confined to nearby shipment. Fair average bark was quoted at $98 per ton, and merchantable, $94 per ton, ex-dock. South and East African extracts 60 percent tannin, were offered at 10c. per pound, exdock, plus duty.

For Late-Market Developments, See Page 4

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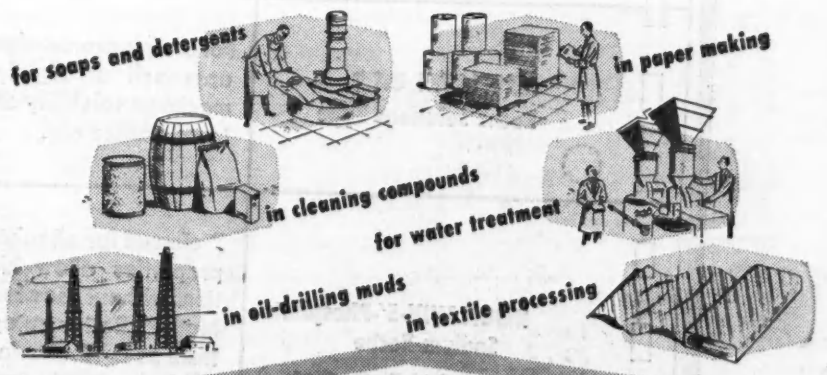

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- Disodium Phosphate, Crystalline
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Laboratory data sheet

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The table below summarizes for quick reference helpful facts about the 3 types of Roche riboflavin. Samples of these products and a technical brochure giving complete information are available without charge. Ask your Roche representative or the Vitamin Division.

Type & Name	Properties and Uses	Solubility	Crystal Micron Size	Melting Point	Moisture Content
RIBOFLAVIN U.S.P. Roche Regular	Density and low electrostatic properties, plus virtual non-hygroscopicity provide easy handling in preparing powdered dietary supplements, pharmaceutical tablets, soft gelatin capsules and dry enrichment premixes.	0.140-.200 gram. per liter (See Note 1)	Under 20	275°-280°C.	0.8-1.5%
RIBOFLAVIN U.S.P. Roche Solutions Type	For use in parenteral solutions which approach or slightly exceed the maximum solubility of B_2. Less likely to crystallize out.	0.120 gram per liter (See Note 1)	Under 20	285°-290°C.	0.2-1.5%
RIBOFLAVIN-5'-Phosphate Sodium-Roche Theoretical B_2 content: 73% Roche product: 70-73%	Preferred for all solutions. Solubility properties allow high concentrations without use of solubilizers (See Note 2). Better taste; no bitter aftertaste as in riboflavin. Specially valuable for highly concentrated oral and parenteral multi-vitamin solutions (with or without ascorbic acid), elixirs, syrups, water-dispersible multivitamin formulations in gelatin capsules, tablets, lozenges.	Depends on pH (See Note 2)	Very fine crystal	Decomposes above 200°	Small percentage of water of crystallization

Note 1 In water at room temperature after shaking with excess for 24 hours.

Note 2 Solubility in water varies with pH as shown in table at right:

pH	Solubility
3.8	43 mg. per cc.
5.6	68 " " "
7.0	112 " " "

Packaging: In Polyethylene bags. One-kilo tamperpruf metal containers. Larger packings in fibre drums. Small quantities in amber screw cap glass bottles.

Source: Vitamin Division

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Drugs, Fine Chemicals, Botanicals

Following the flurry of price changes noted in the preceding week, last week saw the drug market lapse back into its familiar quiet vein. There were no recorded price changes and the approach of Summer customarily portends a slack season in pharmaceuticals. The manufacture of seasonal cosmetic items, such as suntan lotions and sunburn preventatives, will of course, step up consumption of the para-aminobenzoates and other compounds used in these applications.

Announcement was made last week of the availability of technical grade para-aminosalicylic acid. The pharmaceutical grade has long been used in the treatment of tuberculosis and related diseases. There was reported to have been a growing interest in the industrial applications of this acid, leading to its manufacture. The recent drop in crude iodine prices has not been reflected in reduced prices for its salts, it was noted. The decline in the crude price, when sufficiently large, is usually reflected in lower iodide prices, it was said. Supplies of the iodides were reported to be ample for current inquiry and producers were confident of being able to meet any future requirements.

The recent advance in aminophylline and theophylline price schedules had not been accompanied by any advance in domestic caffeine quotations, as of last week, it was noted. Quite frequently, caffeine, aminophylline and theophylline prices move together, in view of the fact that the latter two are derivatives of theobromine which is extracted along with caffeine from the raw material source. Domestic producers of caffeine were reported to be in an advantageous market position compared to that which has been their lot over recent years. With imports of caffeine reportedly down considerably as a result of heavy sales by foreign producers to other countries both in and out of the Iron Curtain, domestic producers have been largely freed of the necessity of competing with the lower priced imported material. Sales of caffeine were said to be moving at excellent levels and consumption was expected to hold steady in the immediate future.

Aspirin—Demand for aspirin (acetylsalicylic acid) reportedly held up rather well in the last few months. A seasonal slackening in consumption could be expected, however, it was said, but the price schedule was expected to hold firm in the immediate future.

Bismuth Salts—Supplies of these compounds continued adequate to meet a demand, which can only be characterized as fair. Consumption of bismuth salts has been largely confined to stomach remedies and seems destined to continue along this line. Former uses for these salts have long since been usurped by antibiotics and other compounds, it was said.

Caffeine—Price schedules on caffeine continue very firm in view of the steadiness in demand and the dearth of imported caffeine in the market. Where formerly, domestic producers were forced on several occasions to cut their prices in order to meet the heavy competition of low priced imported caffeine, the current situation is one in which domestic producers were said to virtually have the entire market to themselves. Heavy selling abroad by foreign producers to other countries has diminished the amount of caffeine offered in the market here, it was said.

The result can be observed in the firm position of domestic caffeine. Very recently, prices on aminophylline and theophylline were advanced by domestic producers, reflecting the growing tightness in supply of these theobromine derivatives. With imports sharply curtailed, the supply of these two compounds has correspondingly shrunken, it was said. The possibility of domestic caffeine prices going up was negative despite the fact that, traditionally, the price structure of caffeine, aminophylline and theophylline have been intimately linked.

Gelatin—Total production of gelatin in March, 1954, amounted to 4,383,582 pounds compared to 4,200,950 pounds produced in February and the 4,482,956 pounds turned out during March, 1953.

Classified by type, production in March this year included 2,990,724 pounds of edible gelatin, 197,062 pounds of technical type, 229,893 pounds of pharmaceutical gelatin and 965,903 pounds photo grade. In comparison, production during February this year included 2,742,296 pounds of edible grade, 289,473 pounds of technical material, 286,272 pounds pharmaceutical gelatin and 882,909 pounds of photographic gelatin. Production in March, 1953, amounted to 3,215,892 pounds of edible type, 230,694 pounds technical gelatin, 501,097 pounds pharmaceutical grade and 735,273 pounds photo grade.

Total gelatin shipments during March amounted to 4,039,161 pounds compared to 4,176,262 pounds in February and 4,218,531 pounds during March, 1953. Classified by type, shipments in March this year amounted to 2,825,339 pounds of edible gelatin, 211,917 pounds of technical grade, 507,321 pounds of pharmaceutical type and 694,584 pounds of photographic gelatin.

By comparison, gelatin shipments in February amounted to 2,889,523 pounds of edible type, 175,767 pounds technical gelatin, 343,998 pounds pharmaceutical grade and 766,974 pounds of photographic gelatin.

Gelatin stocks at the end of March, 1954, aggregated 5,205,127 pounds of edible gelatin, 1,008,274 pounds of technical grade, 706,295 pounds of pharmaceutical gelatin and 3,620,178 pounds of photo grade. Stocks at the end of February, 1954, consisted of 5,039,742 pounds edible gelatin, 1,023,129 pounds technical grade, 783,723 pound pharmaceutical gelatin and 3,348,-859 pounds of photographic gelatin.

Stocks at the end of March last year included 4,755,415 pounds of edible gelatin, 1,022,367 pounds of technical grade, 952,-695 pounds pharmaceutical gelatin and 2,542,124 pounds photo type.

Iodides—To date, there have been no price changes in any of the iodine salts as a result of the cut in crude iodine price a short time ago. The decline in the crude price amounted to 15c., an amount which some observers felt was not sufficient to be reflected in lower salt prices.

Demand for the iodides, on the whole, was reported to be at fair levels with supplies reported adequate to meet current inquiry.

Milk Powder—Terminal markets in nonfat dry milk solids were said to be unsettled. Offerings were liberal with demand irregular. Improved interest was reported for roller process skimmed milk. Sales of surplus stocks to the CCC continued to increase. Purchases from April 29 to May 5, inclusive, amounted to 16,187,219 pounds of spray process and 3,444,317 pounds of roller process.

Under the recently announced plan for selling nonfat dry milk solids at reduced prices to stockfeed manufacturers, the Department of Agriculture has reported sales through May 6 of more than 73,000,000 pounds.

Molasses — Feed molasses prices remained unchanged at most terminals during the week ending May 11, 1954. Prices were steady at all points except in the Gulf area where the New Orleans cane blackstrap price was 10½-11c. per gallon. Gulf demand for feed molasses was off slightly from last week and was slow to moderate. East coast demand also was slow to moderate with west coast moderate to good. Citrus molasses demand was off at several Florida points and the price has been reduced from $12 to $10 per ton at Dade City. Most Florida mills will finish production within 30 days but expect to maintain molasses inventory throughout most of summer. Supplies of feed molasses were generally adequate at all terminals. Production of 1954 Cuban blackstrap reached a total of 215,900,000 gallons, as of April 30, 1954, according to the Cuban Sugar Stabilization Institute. Comparative production as of same date a year ago was 238,200,000 gallons. Yield of molasses per short ton raw sugar through April 30, 1954 was 43.1 gallons.

Exports of 1954 Cuban blackstrap

For Late Market Developments, See Page 4

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(1926-1949 average)

Last week	Prev. week	Last month	May 15, 1953
71.90	71.90	71.91	74.19

(For Current Prices see page 9)

Glycols

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amounted to 44,800,000 gallons with 9,100,000 gallons being loaded as of April 30, 1954. Trade sources indicate a production of about 35,000,000 gallons of hi-test molasses in Cuba as of May 9, 1954. Four Cuban mills have completed hi-test production as 35 mills continue hi-test operations.

Tartrates—Tartrates continued in a firm position in view of the strong market in argols abroad. Demand was reported to be holding up quite good, on the whole, and consumption was expected to remain at current levels for the immediate future, at least. Consumption of tartaric acid and cream of tartar usually increases seasonally in the warm weather months.

Some domestic producers reported that they had picked up additional business from customers formerly more dependent upon imported tartrates for their source of supply. Prices could be expected to continue firm, it was said.

Botanicals

The market in botanicals continued quiet last week. As the time for gathering new crop material approaches, buyers were said to be inclined to hold back, confining purchases to satisfying immediate needs in the hope that prices might decline in the future.

In the case of most items, it was still too early in the year to forecast with any accuracy the size of collections. It was hoped that the labor supply would be better than it was last year, however. There were no price changes in domestic items although imported botanicals noted to be firmer were arnica flowers, ipecac root and orris root.

Arnica Flowers—Detention by the FDA of 12 bags of supposed arnica flowers was noted last week. Spot stocks of this botanical were virtually nil with the only trading done reported at $2 per pound. This was slightly better than double the previously quoted price. Consumption of arnica flowers, on the whole, was reported to be small with supplies from Central Europe very difficult to obtain.

Aloe—Demand for aloe was reported to be on the quiet side. Prices were steady with Cape aloe at 36c. for the whole and 50c., for the powder. Curacao aloe was quoted at 50c. to 55c. white no prices were available on Socotrine aloe.

Cascara Sagrada—Demand for this bark was reported to be seasonally quiet. Supplies were ample for current inquiry and were expected to continue adequate in the immediate future. Spot prices were pegged at 36c.

Ergot — There were no new developments in this market last week. Demand was steady but unspectacular. Supplies were ample to meet consumer requirements and prices on spot were quoted at $3.25 to $3.50 per pound.

Ipecac Root—The supply situation continued on the tight side, according to trade sources. Consumer inquiry was steady and the current situation could grow worse if the labor supply in collection areas does not improve, it was said.

Lycopodium—The market in lycopodium was quiet. Prices ranged from $1.25 to $1.50 with not much material reported available at the lower figure. Supplies, on the whole, were ample and expected to continue adequate, it was said.

Nux Vomica—Demand was reported as routine. Supplies were adequate and the current spot market ranged from 10c. to 12c. on the whole and from 15c. to 17c. on the powdered material.

Orris Root—There were indications that the market abroad was advancing due to the tightening in supplies. The next crop was not expected before September and in the interim, carryover stocks were expected to tighten. The spot market on Florentine root ranged from 42c. to 45c. on the whole root while the powder was about 5c. higher. Verona, whole orris root was pegged at 35c. and the powdered root, 5c. more per uound.

Quince Seed—Supplies of Persian quince seed were reported to be on the scarce side. Prices were quoted at about $2 per pound, on a nominal basis.

Senega Root—Collections of new crop root were expected in another month or more, according to trade sources. Spot prices have been maintained at $2.30 to $2.40 per pound. Carryover from the preceding crop was reported to be slight and the question of whether sufficient cheap labor will be available was under consideration, it was said.

Soap Bark—The market proceeded unchanged from last report. Prices, on spot, for the whole root ranged from 28c. to 30c. while the crushed root was 32c. to 33c. and the powdered, 35c. to 37c.

Chemical Story to Be Told

—Continued from page 7

every major metropolitan center, and in hundreds of smaller communities.

During the week, chemical industry representatives will make over 1,000 speeches to civic, professional and service groups. Plant visits will be held, essay contests conducted and displays will appear in store windows, libraries and schools. Over a dozen states and hundreds of municipalities have officially proclaimed Chemical Progress Week.

"The entire purpose of this concerted activity is to explain to our plant community neighbors and to the American people in general, the contributions of the chemical industry in terms of daily life," according to William C. Foster, MCA president.

In explaining why America's sixth largest and fastest growing industry had embarked on a special week, Mr. Foster said the chemical industry is attempting to correct an established lack of information about the industry on the part of the average individual.

"Surveys have shown," he said, "that the average person doesn't think our industry has much of a direct bearing on him personally. Nothing could be more wrong and Chemical Progress Week is one of the steps we are taking to correct the situation.

"During the week we intend to tell as many people as we can how drugs and pharmaceuticals contribute to better health; how fertilizers mean more and better food; how synthetic fabrics mean more comfortable and longer wearing clothing; how plastics are intimately involved in our life.

"We'll tell what this industry means in terms of national defense, and how everything the industry does stems from an aggressive research and development program that each year results in new or improved products.

"In pointing out these things," Mr. Foster declared, "we will explain that over 750,000 people have secure jobs in a safe industry."

Butter Support Program

—Continued from page 7

Riepma noted, "it is worthwhile to analyze its validity as a solution to the problem." The problem behind the butter surplus, according to Mr. Riepma, is the need for economical production and disposition of more milk in the form of whole milk products. He admitted that this couldn't be accomplished overnight. "But," he said, "it will not be accelerated by continued dependence upon 'crisis' disposals."

"The harsh possibility confronting the vegetable oils market," the margarine leader said, "is that dairy fat in the form of butter will drift into some kind of subsidy which by cut-price disposal sales or by legislation now before congress, may be self-perpetuating."

Turning from the butter surplus situation, Mr. Riepma told the cotton oil producers that otherwise the margarine picture for 1954 looked good. Barring government surplus sales, he predicted, based on output so far, equal or even greater production than last year's record 1,292,000,000 pounds.

Mr. Riepma reported a general swing to cottonseed oil by margarine manufacturers during the past few months, which he said has amounted to perhaps as much as double the usage rate of last year. Noting that without margarine, year-end stocks of cottonseed oil would have been 90 percent greater, Mr. Riepma stated the necessity of a strong program of promotion on margarine.

Growth for Margarine Seen

Mr. Riepma said he felt margarine's use can continue to grow, but added that every pound must be fought for. He noted that the rapid gains which followed the repeal of federal laws restricting margarine had slowed to a 0.5 percent increase in 1953. However, he pointed out that there is room for expansion because overall consumption of table fats, including both margarine and butter, is down.

"Today," he reported, "margarine and butter together are 2.6 pounds per person, or about 400,000,000 pounds total, below the 1940 level."

"In the long pull ahead," Mr. Riepma stated, "margarine enjoys the prodigious advantage that it is the more economic form of table spread to produce. As such, it is a logical partner of milk and the other foods—nutritionally and economically." Mr. Riepma urged redoubled research to improve margarine and more intense efforts aimed at making the consumer conscious of the product's merits.

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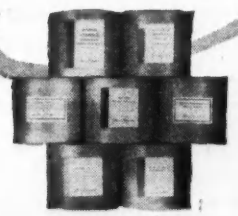

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AIC Unit's June Agenda To Detail Gains in Drugs

Recent studies of drug effects on mental disorders, latest progress in the chemical attack on hardening of the arteries, and the role of pituitary hormones in the body are three of the topics to be discussed at the fourth national medicinal chemistry symposium, to be sponsored by the American Chemical Society's division of medicinal chemistry at Syracuse University, Syracuse, N. Y., June 17 through 19.

Dr. Charles F. Kettering, a director and research consultant of General Motors Corporation since he retired from active research in 1947, will speak at the banquet June 17.

Dr. Amel R. Menotti, of Bristol Laboratories, Inc., is chairman of the symposium and Dr. Thomas P. Carney, of Eli Lilly & Co., is program chairman. Dr. Alfred Burger, of the University of Virginia, is chairman of the division of medicinal chemistry.

Bids Wanted

Chlorine, liquid, 30,000 lbs., inv. 342, May 27, Purchasing & Contracting Officer, Army Chemical Center, Md.

Chromic acid, 4,800 lbs. chromium trioxide, tech. grade, type 2, inv. 70, May 25, Watervliet Arsenal, Watervliet, N. Y.; 52,000 lbs. chromic acid, tech. grade, Oakland; Mare Island; Clearfield, Utah, inv. 1-2054, May 25, Gen. Stores Supply Officer, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Gas, acetylene, for period from July 1, 1954, through June 30, 1955, inv. 14, May 20, Vets. Adm. Hospital, Supply Officer, 7300 York Road, Cleveland 30, Ohio; oxygen gas, bulk, from July 1 through June 30, 1955, inv. 2, May 19, Vets. Adm. Hospital, Supply Officer, 2500 Overlook Terrace, Madison 5, Wisc.

Paint, latex base, from July 1 through June 30, 1955, inv. 2S-KC-32761, May 26, Gen. Services Adm., Fed. Supply Service, 911 Walnut St., Kansas City 6, Mo.; 760 gals. in 5-gal. pails, enamel phenolic, lusterless, outside green, #342, inv. 510, May 19, 320 gals. in 5-gal. pail paint, white lead and oil, exterior, ready mixed, inv. 508, May 19, Corps of Engnrs., District Engnr., San Francisco District, San Francisco, Calif.; 500 gals. in 5-gal. cans traffic paint, reflectorized, white, inv. 3G-44769-R, May 27, Gen. Services Adm., Business Service Center, Region 3, 7th & D Sts., S.W., Washington 25, D. C.

Sodium sulfite, 23,000 lbs., inv. 2B-44411-R, May 20, Gen. Services Adm., Business Service Center, Region 3, 7th & D Sts., S.W., Washington 25, D. C.

Sodium thiosulfate, 74,000 lbs., inv. 2B-44411-R, May 20, Gen. Services Adm., Business Service Center, Region 3, 7th & D Sts., S.W., Washington 25, D. C.

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Borden Co. Names Three In Special Products Div.

Borden Company, New York, has named Dr. J. F. Muller assistant general manager of the prescription products department of the special products division, and has made two other promotions in the special products division. Dr. Muller was formerly prescription products research director, and will be succeeded in this post by Dr. Davis W. Anderson, jr. Joseph W. Sheldon has been named administrative assistant to Dr. Muller and to Harry McNeilly, general manager of the prescription products department.

Dr. Muller has been with Borden's since 1941. Before that time, he was the owner and director of Muller Laboratories, Baltimore, Md. Dr. Anderson was head of the bacteriological and nutrition research laboratories of H. J. Heinz Company, Pittsburgh, Pa., before joining Borden. Mr. Sheldon has been with Borden since 1936.

Oleic Acid Development Announced by Swift & Co.

The industrial oils department of Swift & Co., Chicago, has announced production of a new highly distilled fractionated fatty acid to be known as oleic acid No. 905. Developed for use where high acid number, low titer and color clarity are necessary, the product has exceptional color clarity and stability, officials said. The acid has been made possible by new manufacturing processes which allow for more selective extraction of color bodies and unsaponifiable material. Specifications are similar to that of a high grade red oil.

MCA Affiliate Picks Two

The Labels and Precautionary Information Committee, associated with the Manufacturing Chemists Association, has elected James S. Walker, manager of technical sales services for Hooker Electrochemical Company, as chairman and William S. Knapp, of General Chemical Division of Allied Chemical & Dye Corporation as vice-chairman. Mr. Walker, formerly vice-chairman, succeeds Robert D. Minteer, of Monsanto Chemical Company.

Chemical Exports: March

—Continued from page 3

cause the New York waterfront strike in March shifted many exports to other ports and created administrative problems in the handling of the export documents. Exports under the Mutual Security Program showed a noticeable increase from $184,400,000 to $203,600,000.

General imports rose from $808,700,000 to $858,100,000, but remained approximately five percent below the 1953 monthly average of $906,200,000.

During the first quarter of 1953, exports, including MSP shipments were valued at $3,394,200,000, or about 13 percent below the 1953 first quarter total of $3,882,500,000. MSP exports amounted to $557,300,000 during this year, or $330,900,000 less than for the same period in 1953. With MSP exports excluded, general exports in the first quarter of 1954 were 5 percent below the comparable 1953 period.

Imports in the first quarter totaled $2,499,700,000 as compared with the 1953 first quarter total of $2,782,900,000.

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Potassium
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Lactose, USP • Terpin Hydrate NF • Epinephrine, USP
PAS Sodium • Theobromine NF • Pepsin NF
Caffeine, Anhydrous USP • Calciferol, USP
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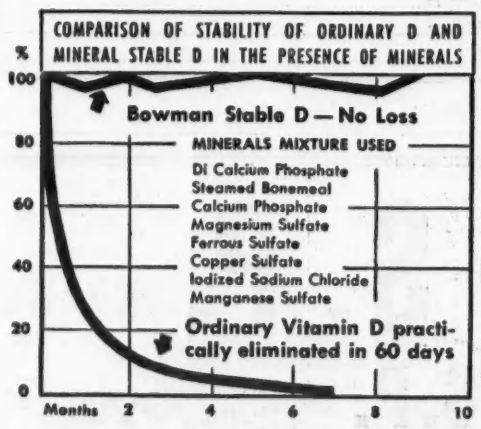
SPECIAL VITAMIN D

FOR PHARMACEUTICALS

MINERAL STABLE D_2 OR D_3



Approved for VITAMIN D upon periodic tests

This fine free flowing powder is the *stability* answer to combinations of Di Calcium Phosphate or other minerals with Vitamin D in tablets, capsules or powders.

Product of N. V. Philips-Roxane, The Netherlands.

ALSO { CALCIFEROL U.S.P. (Crystalline D_2)
PURE VITAMIN D_3 Powder Form
D_3 CRYSTALS U.S.P.

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AGAR—230 bls, Meer Corp, Kobe
5 bls, Interoceanic Commodities Corp, Nagoya
10 bls, Interoceanic Commodities Corp, Yokohama
50 bls, H W Powers Co, Kobe
19 crs, Copenhagen
46 bbls, T M Duche & Sons, Antwerp
ALCOHOL, CETYL — 53 cs, Orbis Products Corp, Liverpool
10 cs, Liverpool
PROPARGYL—30 dms, General Aniline Works, Rotterdam
p-AMINOSALICYLIC ACID-CALCIUM — 4 dms, American International Products Corp, Copenhagen
AMMONIUM CARBONATE—64 dms, Glasgow
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ANNATTO SEED—100 bgs, J Sbroit, Ciudad Trujillo
25 bgs, Trugman & Co, Ciudad Trujillo
ANTIMONY—60 kgs, Watson Geach, Liverpool
20 cs, Watson Geach, Liverpool
TRISULFIDE—41 bgs, Baird Chemical Corp, Bremen
ARECA NUTS—294 bgs, Prentiss Drug & Chemical Co, Colombo
ASBESTOS FIBER—4,000 bgs, Union Asbestos & Rubber Co, Lourenco Marques
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300 bgs, Rubberoid Co, Lourenco Marques
BEESWAX—200 bgs, Reaud Geck Corp, Ciudad Trujillo
28 bgs, Smith & Nicols, Majunga
20 bgs, Leviant & Co, Majunga
36 bgs, H H Pike, Havana
50 bgs, Mercantile Metal & Ore Corp, San Antonio
50 bgs, Irving Trust Co, Ciudad Trujillo
25 bgs, Schutte & Focke, Ciudad Trujillo
25 bgs, Bank of Manhattan Co, Santiago
BEET PULP—1,018 bgs, Wessel Duval & Co, Rotterdam
BENZOIN GUM—4 cs, Merchants Import Export Co, Bangkok
BLEACHING POWDER—75 cont, Chemical Manufacturing Co, Liverpool
BUCHU LEAVES—10 bls, Meer Corp, Capetown
CADMIUM—50 cs, Indussa Corp, Antwerp
CALCIUM CARBONATE—325 bgs, H J Baker & Bro, Liverpool
CAMPHOR OIL—40 dms, Orbis Products Corp, Keelung
25 dms,Givaudan Corp, Kobe
10 dms, Orbis Products Corp, Kobe
SYNTHETIC—100 cs, Bremen
CANANGA OIL—2 dms, Olfactors Inc, Tandjong Priok
2 dms, Internatio Rotterdam, Rotterdam
CAPROLACTAM—100 dms, Rohner Gehrig, Rotterdam
CARAWAY SEED—300 bgs, Louis Furth, Rotterdam
100 bgs, C M Van Sillevoldt, Rotterdam
50 bgs, Archibald & Kendall, Rotterdam
100 bgs, R J Spitz, Rotterdam
250 bgs, Joel Bieler, Rotterdam
250 bgs, Biddle Purchasing Co, Rotterdam
100 bgs, Joel Bieler, Rotterdam
400 bgs, Rotterdam
CARDAMOM—22 cs, Karl H Landes & E Balint, Colombo
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CARNAUBA WAX—278 bgs, F Henjes, Fortaleza
167 bgs, Cornelius Products Co, Fortaleza
67 bgs, S C Johnson & Son, Fortaleza
134 bgs, World Commerce Corp, Fortaleza
751 bgs, W R Grace & Co, Parnahiba
938 bgs, Parnahiba
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167 bgs, Frank B Ross, Natal
111 bgs, Forvent Co, Fortaleza
56 bgs, Wm Diehl & Co, Fortaleza
167 bgs, Fortaleza
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CASSIA—168 bls, Karl H Landes & E Balint, Rotterdam
CASTOR BEANS—23,706 bgs, Spencer Kellogg, Bahia
22,064 bgs, Baker Castor Oil Co, Bahia
8,334 bgs, David Levin, Bahia
3,387 bgs, Spencer Kellogg, Maceio
669 bgs, Baker Castor Oil Co, Manta
635 bgs, Chase National Bank, Bahia
OIL—115 tons, Brazilian Industrial Oils, Fortaleza
64 tons, Bunge Corp, Santos
282 tons, Recife
CHESTNUT EXTRACT—1,500 bgs, Barkey Importing Co, Genoa
CHLORO-ORTHOTOLUIDINE—25 dms, Heemsoth Kerner, Liverpool
CINNAMON BARK OIL—2 cs, George Luecders & Co, Colombo
QUILLS—100 bls, Fuerst Bros, Colombo
25 bls, Kellys America Ltd, Colombo
40 bls, Hismoco American Co, Colombo
CITRONELLA OIL—45 dms, Orbis Products Corp, Keelung
20 dms, Magnus Mabee & Reynard, Keelung
25 dms, Norda Essential Oil & Chemical Co, Keelung
25 dms, Stewart & Davies, Keelung
25 dms, P H Petry, Keelung
10 dms, Norda Essential Oil & Chemical Co, Colombo
CLOVE—205 bgs, Kellys America Ltd, Tamatave
100 bgs, P H Petry, Tamatave
50 bgs, LoCurto & Funk, Tamatave
200 bgs, R T French, Tamatave
60 bgs, Max Van Pels, Tamatave
100 bgs, Otto Gerdau, Tamatave
200 bgs, Becker Mayer Seed Co, Tamatave
300 bgs, George Luecders & Co, Tamatave
400 bgs, A G Dunn, Tamatave
OIL—14 dms, Lo Curto & Funk, Tamatave
LEAF OIL—23 dms, Centfior Manufacturing Co, Tamatave
30 dms, Gillespie & Co, Tamatave
10 dms, George Uhe Co, Tamatave
CINNAMON LEAF OIL—5 dms, Volkart Bros, Colombo
CODLIVER OIL—250 dms, Norwich Pharmacal Co, Bergen
COPAIBA BALSAM—12 dms, Lautier Fils Inc, Manaus
COPAL GUM—57 bgs, O G Innes Corp, Manila
69 bkts, S Winterbourne & Co, Macassar
34 bgs, Guaranty Trust Co, Macassar
117 bkts, Macassar
COPPER OXYCHLORIDE—200 bgs, Antwerp
CORIANDER SEED—322 bgs, Chase National Bank, Antwerp
COTTON LINTERS—295 bls, J H Schroder, Matadi
CRESYLIC ACID—200 dms, H A Gogarty, Liverpool
10 dms, G F Smith, Liverpool
75 dms, Hudson Shipping Co, Rotterdam
CUMIN SEED—546 bgs, Curacao Trading Co, Khorramshahr
190 bgs, American Federal Corp, Rotterdam
182 bgs, A G Dunn, Rotterdam
182 bgs, Levy & Levis Co, Rotterdam
CUTTLEFISH BONE—100 cs, Lisbon
CYCLOHEXANONE POWDER—2 cs, M G Bell Manufacturing Co, Rotterdam
DAMMAR GUM—1,055 bgs, O G Innes Corp, Singapore
64 bgs, S Winterbourne & Co, Singapore
32 bgs, Wm H Schell, Singapore
DEXTRIN—2,100 bgs, Stein Hall & Co, Rotterdam
100 bgs, Morningstar Nicol, Rotterdam
1,580 bgs, National Starch Products, Rotterdam
150 bgs, Paisley Products, Rotterdam
DYES, ANILINE—29 dms, Ciba Co, Rotterdam
50 dms, Sandoz Chemical Works, Bremen
62 dms, Hensel Bruckmann & Lorbacher, Hamburg
6 dms, C A Haynes, Hamburg
2 dms, Heemsoth Kerner, Liverpool
DYES, COALTAR—7 bbls, Antwerp
EPSOM SALT—6 tons, L D Peters & Sons, Liverpool
FISHLIVER OIL—5 dms, Consumers Import C Yokohama
3 dms, Arista Oil Products Co, Yokohama
2 dms, J D Smith Interocean, Yokohama
FUEL OIL—209,189 bbls, Paragon Oil Co, Tampico
103,918 bbls, Paragon Oil Co, Punta Cardo
294,000 bbls, Esso Standard Oil Co, Aruba
169,000 bbls, Esso Export Corp, Aruba
83,865 bbls, Asiatic Petroleum Corp, Curac
GELATIN—306 bgs, Transatlantic Animal Products Corp, Rotterdam
200 bgs, Royal Bank of Canada, Rotterdar
100 bgs, T M Duche & Sons, Havre
133 bbls, Coignet Chemical Co, Antwerp
250 bgs, Antwerp
GERANIUM OIL—1 dm, M Roubechez, Marsei
GINGER—160 bgs, Mincing Trading Corp, Allepp
80 bgs, Mincing Trading Corp, Cochin
156 bgs, Volkart Bros, Cochin
400 bgs, East India Trading Co, Cochin
44 bgs, Volkart Bros, Alleppey
ROOT—169 bgs, Karl H Landes & E Bali Shimizu
104 bgs, Lo Curto & Funk, Shimizu
85 bgs, Wm E Martin, Kobe
GLUE—130 bgs, Jung Trading Co, Liverpool
BONE—204 bgs, Rotterdam
PEARL—400 bgs, Transatlantic Animal By Products Corp, Rotterdam
STOCK—272 bgs, Karr Ellis, Liverpool
23 bls, Karr Ellis, Liverpool
GLYCERINE—150 dms, Plate American Tradi Yokohama
GRAPHITE—1,250 bgs, C Pettinoss, Tamatave
250 bgs, Asbury Graphite Mills, Tamatave
250 bgs, Joseph Dixon Crucible Co, Tamata
500 bgs, Joseph Dixon Crucible Co, Colom
GYPSUM—15,525 tons, U S Gypsum Co, Han port
7,437 tons National Gypsum Co, Dingwall
200 bgs, Whittaker Clark & Daniels, Liv pool
200 bgs, Hammill & Gillespie, Liverpool
HENNA LEAVES—33 bls, S B Penick & Co, Bo bay
HERRINGMEAL—2,000 bgs, Wilbur Ellis Haugesund
HYDROCYCLOHEXYL HYDROPEROXIDE—22 Celanese Corp of America, Rotterdam
HYDROXYPROPIOPHENONE — 4 dms, Natio City Bank, Genoa
2 dms, Genoa
IODINE, CRUDE—40 kgs, Rosenthal Bercow, kohama
20 kgs, Interoceanic Commodities Corp, Yo hama
IPECAC ROOT—2 bgs, Prentiss Drug & Chemi Co, Cristobal
IRON BLUES—27 dms, Van Oppen & Co, Liv pool
CARBONYL—54 dms, Caldwell & Co, Antwe
PERSULFATE—10 bbls, Glasgow
KARAYA GUM—307 bgs, Jacques Wolf & Bombay
123 bgs, Colony Import & Export Corp, Bo bay
61 bgs, Wm M Allison & Co, Bombay
622 bgs, Stein Hall & Co, Bombay
123 bgs, Morningstar Nicol, Bombay
307 bgs, Block Drug Co, Bombay
35 cs, Stein Hall & Co, Marseille
LACTOSE—700 bgs, Chas L Huisking & Co, Sou ampton
LEMON OIL—60 hf cs, George Lueders & Messina
105 qu cs, Messina
LEMONGRASS OIL—11 dms, George Lueders Co, Cochin
6 dms, P Hanrahan, Cochin
6 dms, Lo Curto & Funk, Cochin
11 dms, Centfior Manufacturing Co, Cochi
LIME OIL—1 dm, L A Champon & Co, Port Prince
LOCUST BEAN GUM—1,000 bgs, Mornings Nicol, Piraeus
200 bgs, Dingelstedt & Co, Genoa
150 bgs, Morningstar Nicol, Genoa
MACE—79 cs, Catz American Co, Macassar
MAGNESIUM CARBONATE—100 bgs, Reheis Liverpool
50 cs, Hanover Bank, Liverpool
35 cs, Guaranty Trust Co, Antwerp
TRISILICATE—70 cs, Reheis Co, Liverpool
MANDARIN OIL—20 qu cs, Messina
MANGROVE BARK—1,539 bgs, Lourenco Marq
EXTRACT—2,000 bgs, Saxe Cutch Corp, San kan
MENUKELIVER OIL—10 dms, Consumers Imp Co, Yokohama
MERCURY—47 flks, Jimenez Corp, Tampico
100 flks, Lo Curto & Funk, Tampico
MOLASSES—1,865,391 gals, Pacific Molasses Presto
365,000 gals, Pacific Molasses Co, Caibarie
MONOSODIUM GLUTAMATE—300 dms, Unive Sales Co, Yokohama
MONTAN WAX—700 bgs, Strohmeyer & A Hamburg
200 bgs, Wax & Rosin Products, Bremen
MUSTARD SEED—95 bgs, Amaren Trading Copenhagen
100 bgs, Rotterdam
MYROBALANS—3,047 bgs, Barkey Importing Bombay
667 bgs, Hammond & Carpenter, Bombay
1,454 bgs, Olson Sales Agency, Vizagapata
287 bgs, Barkey Importing Co, Vizagapatan
EXTRACT—200 bgs, River Plate Corp, Liver
NAPHTHALENE—2,474 bgs, Chas Page & Hamburg
2,222 bgs, Rotterdam
NAPHTHOL—3 dms, Verona Dyestuffs, Rotter
b-NAPHTHOL—157 bgs, General Aniline Wo Rotterdam
44 bgs, Antwerp
NICKEL CHLORIDE—7 dms, Atlantic Bank of N Rotterdam
SULFATE—60 bgs, Beekman Shipping Co, erpool
33 bbls, Meyer Shipping Co, Rotterdam
80 cks, Hanover Bank, Bremen
NUTMEG—222 bgs, Dodge & Olcott, Tandj Priok
107 bgs, Macassar
69 bgs, Irving Trust Co, Macassar
38 bgs, Swiss Banking Corp, Macassar
16 bgs, M Sluis, Singapore
134 bgs, Catz American Co, Macassar
68 bgs, Karl H Landes & E Balint, Semar
254 bgs, Internatio Rotterdam, Tandjong P
790 bgs, Rotterdam
OCOTEA CYMBARUM OIL—30 dms, Lo Curt Funk, Itajai
23 dms, Ungerer & Co, Itajai
OITICICA OIL—300 tons, Brazilian Industrial Fortaleza
65 dms, Brazilian Industrial Oils, Fortalez
ORRIS ROOT—40 bgs, Irving Trust Co, Leghor
OURICURY WAX—127 bgs, Cornelius Product Bahia
124 bgs, M Argueso & Co, Bahia
PALM OIL—75 dms, Matadi
PALMKERNEL FAT—1 dm, Daarnheuwer & Rotterdam
OIL—194 tons, Rotterdam
301 tons, Matadi
PAPAIN—10 cs, Wessel Duval & Co, Mombas
43 cs, Wm E Martin, Mombasa
64 cs, National City Bank, Dar es Salaam
20 cs, Wessel Duval & Co, Dar es Salaam
2 crts, Chas L Huisking & Co, Dar es Sal
3 cs, Chas L Huisking & Co, Dar es Salaar
25 cs, Atlantic Overseas Corp, Matadi
PAPRIKA—200 bgs, M J Golombeck, Rijeka
188 bgs, Griffith Lab, Rijeka
200 bgs, National City Bank, Antwerp
PATCHOULI OIL—100 dms, Lo Curto & F Penang
6 dms, Antoine Chiris, Penang

PEATMOSS—1,000 bls, Lewis Intern Co, Bremen
1,000 bls, Gellco Inc, Bremen
600 bls, New Amsterdam Import Co, Bremen
2,000 bls, E J Lang, Rotterdam
1,200 bls, C Gastmeyer, Rotterdam
500 bls, C Fafard, Bremen
1,750 bls, Lion Trading Co, Bremen
3,075 bls, E Dunwoody, Bremen
3,003 bls, Atkins & Durbrow, Bremen
500 bls, E J Lang, Bremen
500 bls, Marine Midland Trust Co, Bremen
PEPPER, BLACK—320 bgs, M Golodetz, Cochin
80 bgs, Internatio Rotterdam, Cochin
80 bgs, Frank Fehr & Co, Cochin
40 bgs, Joensson & Cross, Cochin
160 bgs, M Golodetz, Alleppey
120 bgs, Internatio Rotterdam, Alleppey
80 bgs, A C Israel, Alleppey
120 bgs, States Grain Corp, Alleppey
80 bgs, Peter Commercial Co, Kozhikode
40 bgs, H Golodetz, Kozhikode
360 bgs, Internatio Rotterdam, Kozhikode
80 bgs, J Berlage, Kozhikode
40 bgs, Globe Commerce Corp, Bombay
70 bgs, Borneo Sumatra Trading Co, Singapore
160 bgs, Mincing Trading Corp, Alleppey
40 bgs, Mincing Trading Corp, Bombay
80 bgs, A C Israel, Mangalore
80 bgs, Internatio Rotterdam, Mangalore
656 bgs, Alleppey
40 bgs, A G Dunn, Mangalore
40 bgs, Mangalore
160 bgs, Globe Commerce Co, Cochin
80 bgs, Chemical Bank, Cochin
80 bgs, A C Israel, Cochin
160 bgs, Netherlands Trading Society, Cochin
40 bgs, Cochin
240 bgs, A G Dunn, Cochin
1,096 bgs, Mincing Trading Corp, Cochin
80 bgs, States Grain Corp, Cochin
600 bgs, Volkart Bros, Cochin
280 bgs, Virchand Panachand, Cochin
70 bgs, Joensson & Cross, Singapore
350 bgs, Far Eastern Rubber Importers, Singapore
RED—56 bgs, Lansen Neave, Lagos
WHITE—36 bgs, Transoceanic Trading Co, Tandjong Priok
136 bgs, Joensson & Cross, Tandjong Priok
63 bgs, Ludwig Mueller, Singapore
100 bgs, Ludwig Mueller, Pontianak
70 bgs, Singapore
PETITGRAIN OIL—1 dm, Antoine Chiris Co, Port au Prince
PETROLEUM, CRUDE—114,600 bbls, American Bitumis Co, Las Piedras
390,000 bbls, Socony Vacuum Oil Co, Puerto La Cruz
PHOSPHATE ROCK—800 tons, H J Baker & Bro, Curacao
POLLACKLIVER OIL—60 dms, Arista Oil Products Co, Yokohama
150 dms, Consumers Import Co, Yokohama
20 dms, Guaranty Trust Co, Yokohama
POLYISOBUTYLENE—181 ctns, Nova Chemical Corp, Rotterdam
POLYVINYL CHLORIDE—1,985 bgs, Hanover Bank, Antwerp
1,200 bgs, Antwerp
POPPY SEED—200 bgs, C M Van Sillevoldt, Gdynia
250 bgs, Louis Furth, Gdynia
250 bgs, Levy & Levis Co, Gdynia
250 bgs, Becker Mayer Seed Co, Gdynia
50 bgs, Archibald & Kendall, Rotterdam
250 bgs, A Gronowitz, Gdynia
POTASSIUM FERRICYANIDE—10 cks, Rotterdam
PERSULFATE—50 dms, Lo Curto & Funk, Bremen
PRUSSIATE—800 bgs, American Cyanamid Co, Rotterdam
POTATO STARCH—1,300 bgs, National Starch Products, Rotterdam
10 bls, Dorf International, Rotterdam
100 bgs, B Westergaard & Co, Rotterdam
PSYLLIUM HUSKS—295 bgs, S B Penick & Co, Bombay
PYRETHRUM FLOWERS—128 bls, Industrial Chemicals, Matadi
QUINCE SEED—96 bgs, Meer Corp, Khorramshahr
QUINIDINE SULFATE—5 cs, Chas L. Huisking & Co, Hamburg
RED LEAD—120 dms, Rotterdam
RICE STARCH—225 bgs, American Key Products, Trieste
ROSEWOOD OIL—40 dms, Givaudan Corp, Belem-Para
SAGO FLOUR—545 bgs, Stein Hall & Co, Singapore
SALICYLIC ACID—22 bbls, Fallek Products Co, Rotterdam
SEEDLAC—250 bgs, Haeuser Shellac Co, Bangkok
250 bgs, Mac Lac Co, Bangkok
250 bgs, Bangkok
250 bgs, Unity Import Export Co, Bangkok
250 bgs, Commercial Alcohols Ltd, Bangkok
200 bgs, H C Smith, Calcutta
250 bgs, Calcutta
SERPENTINA ROOT—47 bgs, Meer Corp, Bombay
10 bgs, M W Hardy & Co, Bombay
20 bgs, S B Penick & Co, Bombay
40 bgs, Irving Trust Co, Cochin
SHARKLIVER OIL—5 dms, Consumers Import Co, Yokohama
20 dms, Arista Oil Products Co, Yokohama
SHELLAC—25 bgs, Mac Lac Co, Calcutta
708 bgs, Wm Zinsser & Co, Calcutta
50 bgs, Schwab Bros, Calcutta
100 bgs, H C Smith, Calcutta
150 bgs, Calcutta
25 bgs, Colony Import & Export Corp, Calcutta
200 bgs, Ralli Bros, Calcutta
BLEACHED—40 dms, C H Timm, Liverpool
WAX—44 bgs, Dings & Schuster, Bremen
SODIUM ALGINATE—3 dms, Visking Corp, Glasgow
BICARBONATE—996 bgs, Chemical Manufacturing Co, Liverpool
CYANIDE—220 dms, Rotterdam
SPONIN—10 cs, Karr Ellis Co, Liverpool
SPERMACETI WAX—135 ctns, Glasgow
STARCH—2,000 bgs, All Transport Inc, Rotterdam
NITRITE—20 cks, Marine Midland Trust Co, Antwerp
TALC—6,635 bgs, Charles Mathieu, Genoa
TAPIOCA—161 bgs, Madagascar Agencies, Tamatave
303 bgs, Standard Brands, Itajai
258 bgs, Stein Hall & Co, Tjirebon
FLOUR—5,200 bgs, Stein Hall & Co, Bangkok
1,250 bgs, Internatio Rotterdam, Bangkok
1,000 bgs, Bank of India, Australia & China, Bangkok
500 bgs, Borneo Sumatra Trading Co, Bangkok
2,000 bgs, Morningstar Nicol, Itajai
TARTARIC ACID—200 cs, Phila. National Bank, Rotterdam
TRAGACANTH GUM—30 cs, Brown Bros, Khorramshahr
62 bgs, Brown Bros, Khorramshahr
40 bgs, Khorramshahr
9 cs, Khorramshahr
9 cs, S B Penick & Co, Khorramshahr
TRICHLOROETHYLENE—250 dms, Venice
308 dms, Chemical Manufacturing Co, Liverpool
TUNG OIL—292 tons, Buenos Aires
TURMERIC—80 bgs, H Schlicting & Co, Alleppey
80 bgs, Otto Gerdau, Alleppey
80 bgs, L E Ransom, Cochin
520 bgs, Volkart Bros, Cochin
80 bgs, Alleppey
532 bgs, Mincing Trading Corp, Cochin
160 bgs, Virchand Panachand, Cochin
40 bgs, D Hecht & Co, Alleppey
UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Glasgow
3,400 bgs, Chemical Manufacturing Co, Liverpool
VANILLA BEANS—241 cs, Lo Curto & Funk, Antalaha
47 cs, F Huber & Co, Antalaha
145 cs, L A Champon & Co, Antalaha
42 cs, Norda Essential Oil & Chemical Co, Antalaha
46 cs, Thurston & Braidich, Antalaha
44 cs, Madagascar Agencies, Antalaha
45 cs, J Manheimer, Antalaha
16 cs, George Lueders & Co, Tamatave
VANILLA BEANS—24 cs, Zink & Trieste, Semarang
84 cs, Tamatave
162 cs, E Massinot, Antalaha
45 cs, Bankers Trust Co, Antalaha
89 cs, Marine Midland Trust Co, Antalaha
63 cs, Lo Curto & Funk, Tamatave
VETIVER OIL—1 dm, L A Champon & Co, Port au Prince
WHITING—600 bgs, Pluess Staufer, Antwerp
WOOL GREASE—157 dms, N I Malmstrom, Nagoya
172 dms, N I Malmstrom, Genoa
146 dms, Rosenthal Bercow, Kobe
164 dms, N I Malmstrom, Bremen
YLANG YLANG OIL—2 kgs, Centfior Manufacturing Co, Macassar
9 kgs, L A Champon & Co, Majunga

Los Angeles

CASSIA—591 bls, H M Newhall & Co, Djakarta
CODLIVER OIL—10 dms, Nutro Dog Food Co, Bergen
20 dms, Peter Devolt Oil Co, Bergen
COPAL GUM—81 bkts, D Hecht & Co, Djakarta
63 bkts, O G Innes Corp, Djakarta
COPRA—511 long tons, Procter & Gamble Co, Jolo
800 long tons, Procter & Gamble Co, Dumaguete
300 long tons, Procter & Gamble Co, Cebu
CAKE—4,480 bgs, Balfour Guthrie & Co, Manila
5,596 bgs, Procter & Gamble Co, Manila
5,600 bgs, Wilbur Ellis Co, Manila
4,480 bgs, Pacific Vegetable Oil Corp, Manila
OIL MEAL—6,000 bgs, Snow & Co, Manila
DAMMAR GUM—70 bgs, O G Innes Corp, Singapore
HERRINGMEAL — 14,000 bgs, Wilbur Ellis Co, Haugesund
4,200 bgs, Haugesund
NUTMEGS—100 bgs, Catz American Co, Djakarta
OLIVE OIL—275 dms, Marseilles
50 dms, F & M Importing Co, Genoa
PAPRIKA—100 bgs, Perryman Mojonier Co, Marseilles
PEATMOSS—1,225 bgs, Gellco Inc, Bremen
PEPPER—148 bgs, Arthur G Dunn, Djakarta
PETROLEUM, CRUDE — 17,739 long tons, The Texas Co, Surgal Pakning
SESAME OIL—75 cs, Sam Ward Co, Yokohama
SUNFLOWER MEAL — 2,292 bgs, International Packers Ltd, Buenos Aires
OIL CAKE—4,361 bgs, Buenos Aires
TAPIOCA FLOUR—1,096 bgs, Stein Hall & Co, Tjirebon
ZINC ASH—260 dms, Balfour Guthrie & Co, Newcastle
DUST—67 dms, Balfour Guthrie & Co, Newcastle

Baltimore

MANGROVE BARK—896 bgs, Olson Sales Agency, Lourenco Marques
PYRETHRUM FLOWERS—403 bls, U S Industrial Chemicals, Mombasa
127 bls, U S Industrial Chemicals, Dar es Salaam
TAPIOCA FLOUR—1,200 bgs, Stein Hall & Co, Bangkok
WATTLE EXTRACT—1,409 bgs, River Plate Corp, Mombasa

Boston

WATTLE EXTRACT—211 bgs, River Plate Corp, Mombasa

Charleston

ASBESTOS FIBER—23 bgs, Durban
WATTLE EXTRACT—1,069 bgs, River Plate Corp, Durban
510 bgs, River Plate Corp, Mombasa

Philadelphia

ASBESTOS FIBER—2,540 bgs, Lourenco Marques
BEET PULP—2,004 bgs, Woodward & Dickerson, Rotterdam
BONE—2,114 bgs, Phila National Bank, Bombay
3,576 bgs, Ralli Bros, Karachi
MEAL—4,000 bgs, Kind & Knox, Calcutta
CAMPHOR—10 cs, Titus Pacific Corp, Keelung
CASEIN—500 bgs, Montevideo
286 bgs, National Casein Sales Co, Oslo
CRESYLIC ACID—100 dms, Glasgow
EARTH COLORS—450 bgs, Vandergrift Co, Rotterdam
EPSOM SALT—400 bgs, Woodward & Dickerson, Hamburg
FISHLIVER OIL—200 dms, Silmo Chemical Co, Shimizu
FUEL OIL—109,456 bbls, Atlantic Refining Co, Punta Cardon
GYPSUM—6,317 tons, U S Gypsum Co, Hantsport
MOLASSES—1,919,282 gals, Pastelillo
476,262 gals, Matanzas
OLIVE OIL—125 dms, Phila National Bank, Seville
PALM OIL—50 cs, Rotterdam
PEATMOSS—1,650 bls, Halfmoon Manufacturing & Trading Co, Rotterdam
2,565 bls, Bank of Manhattan Co, Bremen
1,000 bls, E J Lang, Bremen
500 bls, New Amsterdam Import Co, Bremen
500 bls, Marine Midland Trust Co, Bremen
3,400 bls, Bremen
PETROLEUM, CRUDE—178,847 bbls, Gulf Oil Corp, Bahia
632,159 bbls, Gulf Oil Corp, Puerto La Cruz
219,168 bbls, Gulf Oil Corp, Las Piedras
250,561 bbls, Atlantic Refining Co, Mena Al Ahmadi
457,221 bbls, Atlantic Refining Co, Puerto La Cruz
341,924 bbls, Socony Vacuum Oil Co, Mena Al Ahmadi
214,496 bbls, Atlantic Refining Co, Pamatacual
103,669 bbls, Atlantic Refining Co, Las Piedras
196,668 bbls, The Texas Co, Sidon
124,912 bbls, The Texas Co, Puerto La Cruz
119,827 bbls, California Oil Co, Sidon
QUEBRACHO EXTRACT—1,013 bgs, Cupples Co, Buenos Aires
SHELLAC—50 bgs, Flora Lac Co, Calcutta
100 bgs, Dings & Schuster, Bremen
SIENNA EARTH—1,102 bgs, Leghorn
SODIUM NITRATE—5,000 tons, Guaranty Trust Co, Peru
SUMAC LEAVES—206 bls, Olson Sales Agency, Palermo
VANILLA BEANS—53 cs, Camax Co, Vera Cruz
WATTLE EXTRACT—2,560 bgs, Durban

San Francisco

BONEMEAL—2,204 bgs, Joseph C Jett, Alexandria
CASSIA—263 pkgs, Rotterdam
COPAL GUM—35 bkts, D Hecht & Co, Hong kong
COPRA—500 tons, American Trust Co, Cinin
750 tons, American Trust Co, Cebu
700 tons, El Dorado Oil Works, Jolo
500 tons, Cargill Inc, Dumarquete
500 tons, El Dodaro Oil Works, Masbate
CAKE—4,000 bgs, Internatio Rotterdam, Cebu
800 bgs, Falfour Guthrie, Cebu
GYPSUM—9,321 tons, Kaiser Gypsum Co, San Marcos
NUTMEG—100 bgs, Royal Bank of Canada, Port of Spain
OLIVE OIL—50 bbls, R Vanucci Co, Naples
PEATMOSS—3,050 bls, Lastreto Phillips, Rotterdam
1,000 bls, Nurserymens Exchange, Rotterdam
PEPPER, BLACK—40 bgs, Netherlands Trading Society, Alleppey
400 bgs, Alleppey
320 bgs, Mincing Trading Corp, Kobe
QUEBRACHO EXTRACT—800 bgs, International Products Corp, Buenos Aires
SEEDLAC—140 bgs, East Asiatic Co, Bangkok
SODIUM CYANIDE — 267 dms, C M C Chemicals, Middlesbrough
TALC—297 bgs, Brite Trading Co, Genoa
TAPIOCA FLOUR—500 bgs, Stein Hall & Co, Bangkok
UREA—3,156 bgs, Atkins Kroll & Co, Antwerp
SYNTHETIC—100 tons, C M C Chemicals, Middlesbrough

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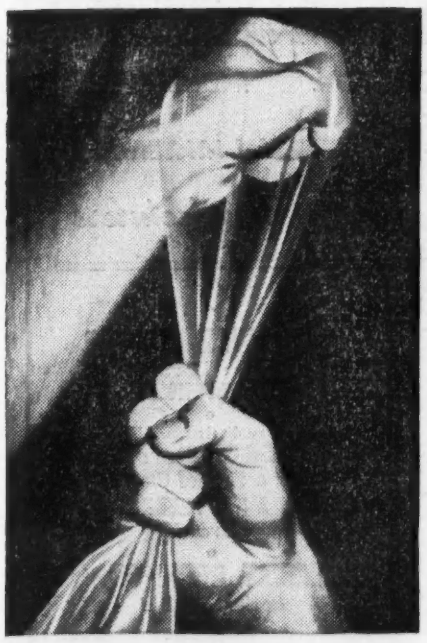

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Protective Coatings Materials

Casein continued to advance on spot in this country, as the Argentine market was subjected to many strengthening influences. Copper naphthenate was advanced, although other driers showed no price activity. Prime pigments were without feature pricewise last week, with most colors moving to a hand to mouth buying interest. Lead and zinc pigments were quiet, reflecting the metals markets.

Synthetic resins were varied in position. Alkyds sold in sizable quantities, but with the large number of producers in business, no one maker could report a good volume of sales. Polyvinyl acetates moved very well to the paint trade, and to wire coaters. Industrial sales of resins were not up to snuff, according to most sources.

The plasticizers market was buffeted by continuing reports of price-shading, particularly for the bellwethers, dioctyl phthalate and di-iso-octyl phthalate. The situation for these two was reflected in other plasticizers, notably diethyl and dimethyl phthalates. Tricresyl phosphate was unchanged. Sebacates were steadier than the general tone of the market would indicate. Customer interest in cellulose acetate butyrate continued to expand.

Copal and dammar gums displayed firmness. The shellac market steadied after substantial increases at London and Calcutta. TN and superfine orange grades scored gains on spot, with bleached grades firm and unchanged.

Price Trends

Advanced

Casein, Argentine, 1c. per lb.
Copper naphthenate, 2c. per lb.
Shellac, superfine, 1c. per lb.
TN, 1c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 15, 1953
96.59	96.58	96.53	89.85

(*For Current Prices see page 9*)

Prime Pigments

Aluminum Paste, Powder—Sales of these pigments so far this year were said by one source to be running about ten percent behind those for the corresponding period of 1953, and about even with the pace for 1952. Prices were unchanged, with supplies plentiful. Current consumption was hand-to-mouth, with buyers interested in prompt shipment to cover immediate needs.

Figures compiled by the Bureau of Census show that shipments of aluminum powder and paste for 1953 totaled 44,423,000 pounds, of which 26,951,000 pounds were for direct military use, and 17,472,000 pounds were for other use. Shipments for military use in 1952 were higher, at 33,058,000 pounds, while civilian consumption was lower for that year, at 16,603,000 pounds. Shipments for 1952 totaled 49,661,000 pounds.

Cadmium Colors—There was no appreciable change in this market. Demand continued fairly slow for all types. Despite the selenium shortage, stocks of cadmium reds and maroons were not dangerously scarce. Prices held unchanged.

Carbon Black—The market was currently more active than during January and February. Demand from all quarters was said to have improved. Quotations were unrevived. Sales of carbon black produced from natural gas and liquid hydrocarbons in 1953 totaled 1,559,491,000 pounds, as compared to 1,447,182,000 pounds sold in 1952, according to the Bureau of Mines. Some 1,133,594,000 pounds were sold to the rubber industry in 1953, as compared with 1,074,545 pounds in 1952. Sales to ink companies for 1953 totaled 45,801,000 pounds, as compared with 44,116,000 pounds for 1952. Paint company sales for 1953 totaled 8,464,000 pounds, as compared with 10,628,000 pounds for 1952.

Chrome Colors—There were no price changes last week. Demand was generally improved over the first quarter. The same situation applied to most dry colors. Supplies were plentiful.

Earth Colors—One source said that business was holding up to 1953 levels, and that since 1953 was a record year, there was nothing to complain about. Consumers ordered frequently to cover immediate needs.

Lead Pigments—Prices were stable, reflecting the quiet undertone of the pig lead market. Buying interest in white leads was better than in previous weeks, as more paint was being manufactured in anticipation of the summer paint season. Oxides moved steadily. Supplies were plentiful.

Titanium Dioxide—Demand for all types continued to hold up well, but not to the point where supplies were outstripped. Prices remained the same.

Tungstated Colors—Although tungsten metal increased, with a subsequent advance in sodium tungstate, producers of PTMA pigments made no move toward adjusting prices last week. It was felt that for the present, increases in raw materials could be absorbed. However, it was said that should sodium tungstate rise any further, PTMA colors would have to be raised accordingly. Demand was slightly better than previously. Supplies were adequate enough to take care of consumers needs.

Zinc Oxide—Demand from the paint trade was active last week. Prices were unchanged, reflecting in part the stability of the slab zinc market. Stocks were plentiful.

Synthetic Resins

Alkyds—Competition remained extremely heavy last week, owing to the large number of makers, and lengthy supplies in many instances. Consumption was thought to have diminished slightly, with consumers buying for immediate needs. Prompt delivery was requested in most cases.

Maleics—Industrial sales were not quite up to manufacturers' expectations. It was said that the appliance industry was not coming into the market as had been expected. Prices were stable, with supplies ample.

Phenolics—The market was about unchanged last week. Demand was average with stocks sufficient to cover actual needs.

Polyvinyl Acetate—One maker reported sales running substantially ahead of business for the corresponding period of 1953. The paint trade come into the market strongly, as sellers placed emphasis on "do it yourself" technics which would appeal to the home owner. The wire coatings industry was also active, with consumption in that field well sustained. One maker reported its plants to be running at near-capacity levels, while reports of other producers varied as to production.

Lacquer Materials

Cellulose Acetate Butyrate—Manufacturers noted that developmental interest in half-second butyrate had expanded considerably. Chief inquiry appeared to be for paper coating, where melt or solution could be used with good results. Demand for use in pigmented lacquers was also prevalent. Prices held steady and without change.

Dibutyl Phthalate—The market was judged soft by some producers, due to competitive conditions. Consumer interest was not as active as some sources would have liked. List prices continued without change.

Diethyl Phthalate—There were rumors of a further weakening in the alcohol market, resulting in a downward influence on pricing. However, there was no move to lower prices last week.

Di-iso-octyl Phthalate—Current listings were shaky as firm bids for large quantities could have shaded prices several cents per pound. Reports persisted that there had been a flurry of offerings at well below the current market.

Dioctyl Phthalate—Although competition in this market was not as severe as that for DIOP, it was evident that most producers were concerned about the pres-

Protective Coatings Shipments

The following table from the Bureau of Census indicates total factory shipments of paint, varnish, and lacquer in February compared with March:—

	March	*February
Trade sales of paint, varnish and lacquer	70,996,000	60,098,000
Industrial sales, total	46,768,000	39,915,000
Paint and varnish	34,657,000	29,550,000
Lacquer	12,111,000	10,365,000
Total sales	$117,764,000	$100,013,000

*Revised.

Total sales, Jan.-March....$322,409,000

For Late Market Developments, See Page 4

ent price status. Reports of shading gave trade an unsteady undertone.

Natural Resins

Copal and dammar gums were active on spot in this country, as consumers came into the market frequently in order to cover actual needs. Manila DBB copal was scarce at primary sources and in this country. Other resins were not lengthy in supply. Foreign buying continued to be a factor in keeping the market firm.

Shellac—London and Calcutta markets gained steadily, then tapered off early in the week to an even pace. Suppliers here were uncertain whether the leveling-off period had approached, although it was felt that arrival of new crop material at primary markets was having effect. Spot listings continued firm for all grades, with increases of 1c. per pound for superfine and TN.

Miscellaneous Materials

Casein—Argentine material continued to advance on spot in this country to 22c. per pound, duty paid. Sellers were reluctant to make offerings both here and in the Argentine. Current shipment was nominal at 21¾c. to 22c. per pound. More pressure was placed on Argentine stocks last week due to the fact that France appeared oversold, as casein output there was not what had been expected. Continued heavy buying from European countries normally reliant on French production also placed pressure on the Argentine market.

Copper Naphthenate—Price for material containing 8 percent copper was advanced 2c. per pound.

Glue — Prices were unchanged last week. The following figures prepared by the Bureau of Census indicate in pounds the production shipments, and stocks of animal glue.

Production

	March	February
Hide, glue, total	5,255,676	*4,775,800
Low grade	1,733,712	*1,544,601
Medium grade	1,557,402	*1,470,847
High grade	1,246,729	*1,225,968
Extra high grade	717,833	*534,384
Bone glue, total	5,209,771	5,364,916
Green	3,632,646	3,936,333
Extracted	1,577,125	1,428,583
Glue, total	10,465,447	*10,140,716

Shipments

Hide glue, total	3,457,443	*3,437,518
Low grade	1,104,989	*1,190,863
Medium grade	1,030,615	*1,099,953
High grade	750,316	*629,138
Extra high grade	571,523	*517,564
Bone glue, total	4,537,212	5,713,491
Green	3,237,714	4,544,899
Extracted	1,299,498	1,168,592
Glue, total	7,994,655	*9,151,009

Stocks

Hide glue, total	24,720,337	*22,922,104
Low grade	11,909,012	*11,289,122
Medium grade	5,156,657	*4,644,338
High grade	5,209,301	*4,685,474
Extra high grade	2,445,367	*2,303,170
Bone glue, total	16,635,637	15,963,078
Green	10,303,350	9,908,418
Extracted	6,332,287	6,054,660
Glue, total	41,355,974	*38,885,182

*Revised.

Fillers and Inerts

The market in general was unaffected by price changes last week. Calcium carbonate moved to good demand from the paint trade. Silica was relatively unchanged. Suppliers gave no indication that stocks of any one material were short.

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri.	Mon.	Tues.	Wed.	Thur.
Drums—					
G	...	...	...	$7.42	...
K	$7.58§	$7.50	...	...	$7.50
M	7.50	7.55	...	7.50	7.48
N	7.51§	7.57	...	7.70	...
WG	...	7.695§	7.72§	7.67§	7.67§
WW	7.75§	7.75§	7.74	7.75§	...
Bags—					
K	7.40	...	7.39	...	7.57
M	7.37	7.37	...	...	...
N	...	7.40	...	...	...
WG	...	...	...	...	7.52
WW	...	7.595§	...	...	...

Tankcars (for week ended May 7)—
WW $7.45, N $7.20, K or better $7.19§, 692*

Sales, USDA
1,066* 693* 730* 1,255* 570*

New York
(per 100 lbs., c.l., Friday)
B through M $8.55, N $8.60, WG $8.75, WW $8.90

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.523§	.521§	.5225	.523§	.52
Sales	12,000¶†	22,000¶†	16,000¶†	18,000¶†	34,000¶†

New York, Friday, per gal. 7 lbs., tankcars, 61c., l.c.l. 73c.

*Drums equivalent. †Tankcars. ¶Gallons. §Average price.

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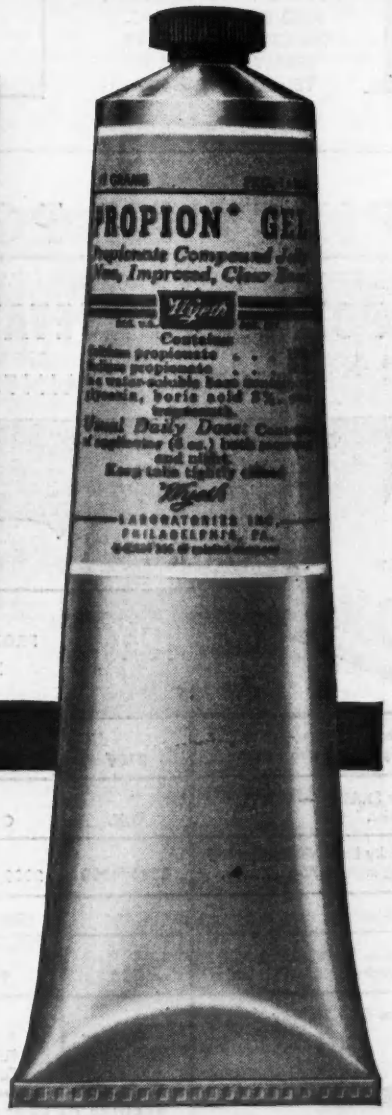

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	POLYCO 522	PRODUCT X	PRODUCT Y	PRODUCT Z
Water Resistance — Gardner Straight Line Scrub Tester	2100	1975	950	1300
Color Stability — 350°F, 80 mins.	O.K.	O.K.	Darkens	Darkens
Viscosity Increase, Accelerated Aging in Paint 75°C, 72 hrs.	1500/4000	2000/9000	1100/18000	1250/10000
Film Clarity	Clear	Cloudy	Opaque	Cloudy
Gloss — Air Dried Film 60° Photovolt Gloss Meter	108	99	54	63
Freeze-thaw Stability 1 Cycle 2 Cycle 5 Cycle	O.K. O.K. O.K.	Fails Fails Fails	O.K. O.K. O.K.	O.K. Fails Fails

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Naftone, Inc., Announces Availability of 'Kayphenates'

The potassium salts of pentachlorophenol and orthophenylphenol are now available commercially, for the first time, according to an announcement by Naftone, Inc., New York.

"We are making these materials available," said C. A. Kiebsattel, technical vice-president, "primarily to enable manufacturers of water dispersed paints to replace the sodium salts, formerly used as preservatives, with 'Kayphenates'. The hazard of efflorescence is thereby reduced." The 'Kayphenates,' the trade name of the new products, are being made by Associated Sales & Supply Company at its plant in St. Louis, Mo., from substituted phenols produced by Monsanto Chemical Company.

Phila. Paint Technicians Pick Officer Slate for 1954-55

The Philadelphia Paint and Varnish Production Club has nominated Frank M. McNerney as president for 1954-55. Others on the slate are:—Vice-president, David T. Nivin; secretary, Emory G. Fleming; treasurer, J. P. Snyder; assistant treasurer, James Sandeman, and council representative, Phillip J. Whiteway, jr. W. Bayer and Joseph F. Vozzella have been nominated for members-at-large on the executive committee. Elections will take place at the meeting May 19.

Washington Talks

—Continued from page 5

compiled. The directory lists some 4,000 classes of commodities covering more than 5,000,000 items and makes it easy for the businessman to learn who in the federal government buys what and where.

The ninety-two page directory is designed as a companion to SBA's "Government Specifications Directory" now being revised and which will be available shortly. This latter directory will provide businessmen with a ready-reference guide to the locations near his own place of business where he can inspect specifications and standards for items purchased by both military and civilian agencies of the government.

SBA Administrator Wendell B. Barnes comments that wide dissemination of information on who buys what and where in the federal government should result in more bidders, which in turn should help the government by insuring more competitive prices, and making possible greater savings. Also it should stimulate wider diffusion of orders among manufacturing plants, thus aiding in the program of diversifying our defense production.

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Oils, Fats and Waxes

Quiet trading was noted in oils and fats last week. Soybean oil was lower early, but rallied, closing unchanged. Peanut oil was slightly lower. Crude cottonseed oil was firmer. Lard was irregular, but closed higher.

Crude coconut oil developed an easier tone, declining fractionally. Trading improved at the lower level which stiffened the market and prices were higher at the close. Copra was unchanged.

Oilmeals continued unsettled. Soybean meal declined $2, cottonseed meal declined $2.50 and peanut meal, $2 per ton. Demand for meal was spotty, and confined to nearby needs.

Buying interest for tallow and greases was light and quotations were reduced fractionally for all grades. Soapers were buyers at the decline. Export business took place at premiums, but the volume of business was reported limited.

Tung oil was steadier and higher. Moderate volume of business was reported for immediate delivery. Linseed oil was advanced fractionally due to the stronger flaxseed market.

Firmness of beeswax and ouricury featured the vegetable wax market. Scarcity of crude beeswax on spot and for shipment from primary sources kept the market firm at the recent advance. Refined ouricury continued scarce and light spot stocks were boosted 3 cents with most sellers holding for $1 per pound. Carnauba wax was in the doldrums. Consuming demand continued slow. Yellow grades declined 1 cent per pound. Other grades were unchanged, but could have been shaded for sizable quantities.

Price Trends

Advanced

Cocoa butter, 8c. per lb.
Lard, ¾c. per lb.
Oil, coconut, crude, ¼c. per lb.
Cottonseed, crude, ¼c. per lb.
ref., ¼c. per lb.
Linseed, 3/10c. per lb.
Tung, ½c. per lb.
Wax, ouricury, ref., 3c. per lb.

Reduced

Cottonseed meal, $3.50 per ton.
Greases, ¼c. per lb.
Oil, palm kernel, ½c. per lb.
Peanut, crude, ¼c. per lb.
Peanut meal, $2 per ton.
Soybean meal, $2 per ton.
Tallow, ½c. per lb.
Wax, yellow, 1c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	May 15, 1953
116.70	119.66	116.51	94.73

(*For Current Prices see page 9*)

Vegetable Oils

Castor—Demand reported limited to fill-in needs. All grades were quotably unchanged.

Coconut—Trading was fairly active at lower prices early in the week. Sales took place at 13½c. per pound, tankcars, f.o.b. Pacific coast for nearby shipment; 13¼c., May and 12½c., June. Tankcars at New York also were quoted at 14c. per pound, nearby. At the close the market became stronger. May advanced to 14c. f.o.b. Pacific coast; 13½c. June and 13c. July. At New York tankcars were raised to 14¼c.

Corn—Business was light. Crude was sold at 14½c. per pound, tankcars, f.o.b. mills. Refined oil was held at 18c. per pound, tankcars, New York basis.

Cottonseed—Bleachable cottonseed oil futures remained steady last week, declining early with the break in soybeans, but rallied with beans and lard, closing slightly higher for the week. Trade interests continued to absorb May and July liquidation. The scarcity of May tenders added strength to nearby oil. Offers of nearby oil also were light. Cash oil was well held and quoted at 17⅞c. per pound, tankcars, New York prompt delivery. Trading in crude cottonseed seed oil was more active. In the Valley 14c. was bid and 14⅛c. asked for tankcars, f.o.b. mills. The southeast was nominal at 14¼c. and Texas, 13¾c. to 14⅞c. Crude offerings were light and market slightly higher.

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended May 14 follow:—

	Sales	Cents per pound—High	Low	Close
May	81	16.60	16.15	16.30S
July	179	16.30	15.70	16.10S
September	37	14.37	13.85	14.13@14.19
October	8	14.05	13.70	13.80@13.95
December	21	14.20	13.75	13.81@13.95
1955, March	8	14.00	13.90	13.90S

Total sales, 334 contracts.

Memphis.—Crude cottonseed oil was 14c. bid tankcars, f.o.b. mills. Crude soybean oil was steady at 14c., per pound, tankcars, Decatur. Cottonseed meal quoted at $67.50 per ton, sacked, Memphis—and cottonseed cake, $63 per ton Valley. Demand for cottonseed hulls was quiet and held at $5 per ton, bulk, Memphis.

Linseed—This market was stronger and up fractionally. Raw oil was advanced to 14.3 per pound, tankcars, f.o.b. mills, and 14.6c. warehouse, Minneapolis. Trading continued restricted to fill-in needs, but the market reflected the steadiness of cash flaxseed. Deliveries against former contracts continued to move in good volume.

Additional sale of linseed oil totaling 33,600,000 pounds was made at 7c. per pound, f.o.b. storage point by CCC for shipment to friendly countries.

Minneapolis.—Only scattered, fill-in sales of raw linseed oil were made the past week. Tankcar asking price held steady at 14c. a pound, bulk, f.o.b., Minneapolis. Warehouse bulk pricing base was 14.3c. a pound. Rock-bottom tankcar trading price was said to be in the vicinity of 13.7c. to 13.8c. a pound, with July offered at around 13c. a pound, bulk, Minneapolis. Shipments continued at a good rate.

Shipments of linseed oil, in pounds, were as follows:—

	1953-54	1952-53
Past week	5,760,000	5,280,000
Since Sept. 1	218,040,000	244,890,000

Flaxseed—Market was firmer as offers for spot delivery was practically nil.

Minneapolis.—Bids remained firm on cash flaxseed as offerings for spot and to-arrive sale virtually dried up. With the May contract due to expire May 19, bids were made at a flat $4.01 a bushel rather than at any set premium over the nearby future. Trades were made at $4 to $4.02 a bushel, delivered Minneapolis. There were only a couple cars of seed offered in the spot cash market and 16 cars and 10,000 bushels sold on a to-arrive in May basis. Actual receipts of flaxseed for all accounts last week amounted to 81 cars as against 79 cars the preceding week and 56 cars in the like week last year. Some private estimates were that this year's flaxseed crop may run as high as 45,000,000 bushels.

Receipts and shipments of flaxseed, in bushels, were as follows:—

	Receipts 1953-54	Receipts 1952-53	Shipments 1953-54	Shipments 1952-53
Past week	141,750	95,200	21,000	34,000
Since Sept. 1	15,883,900	12,540,800	3,207,650	2,676,150

Oiticica—Buying interest was reported slow. Liquid ranged from 17c. to 17¼c. per pound, tankcars, New York, prompt delivery. Drums were unchanged at 18½c. to 19c. per pound, according to quantity. Imports totaled 300 tons at New York last week.

Olive—Business was limited to prompt requirements. Market was unchanged at $2.20 to $2.25 per gallon, duty paid, spot, as to quantity.

Palm Kernel—Shipments were easier and quiet at 13½c. per pound, tankcars, duty paid for prompt delivery.

Peanut—Trading lacked snap. Crude oil was offered at 17½c. per pound, tankcars, f.o.b. mills. Refined oil was available at 21⅜c. per pound, tankcars, New York delivery. The government reported the sale of peanuts for crushing from January 1 through March 31 at 33,652 tons, valued at $4,664,404.

Soybean—Crude oil developed a stronger tone with firmer soybeans regaining early declines. May was sold at 14c. per pound, tankcars, f.o.b., Decatur; June-July at 13⅞c., and 10¾c. October-December. Refined salad was quiet and available at 16¾c. per pound, tankcars, New York delivery.

Sales and prices of crude soybean oil futures on the N. Y. Produce Exchange in tankcars (60,000 pounds) for the week ended May 14 follow:—

	Sales	Cents per pound—High	Low	Close
May	27	14.00	13.80	13.89@13.92
July	77	14.00	13.60	13.79S
September	15	12.15	11.80	12.01@12.05
October	6	10.50	10.80	11.01@11.05
December	14	10.96	10.59	10.59S
1955, March	1	11.02	11.02	10.56@10.58

Total sales, 140 contracts.

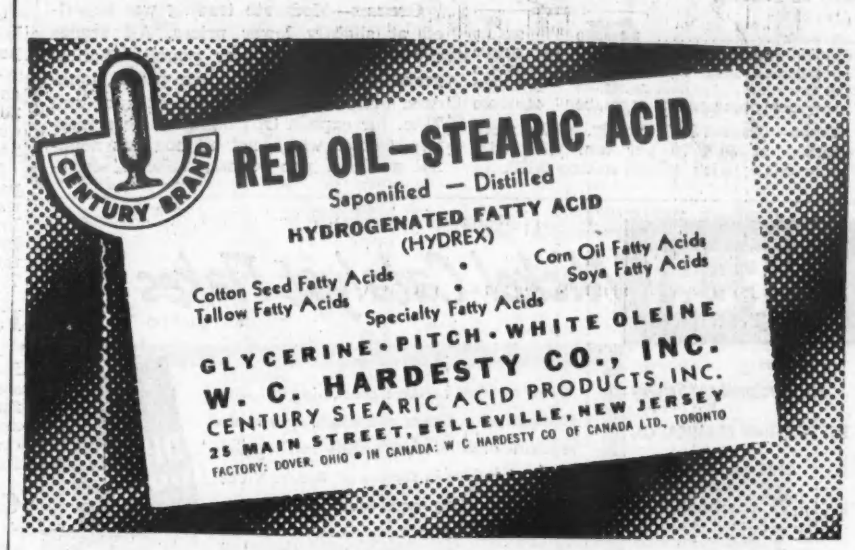
Tung—Market tone was steadier and fair volume of business was booked, chiefly for nearby at 22⅜c. per pound, tankcars, New York, which is ⅛c. higher than previous business. Drums were maintained at 22¾c. to 24¼c. per pound, depending upon quantity. Arrivals totaled 292 tons at New York from the Argentine last week.

Miscellaneous Materials

Castor Beans—Shipments were firmer and $105 per ton bid, f.o.b. Brazilian ports.

Imports of castor beans and castor oil

For Late Market Developments, See Page 4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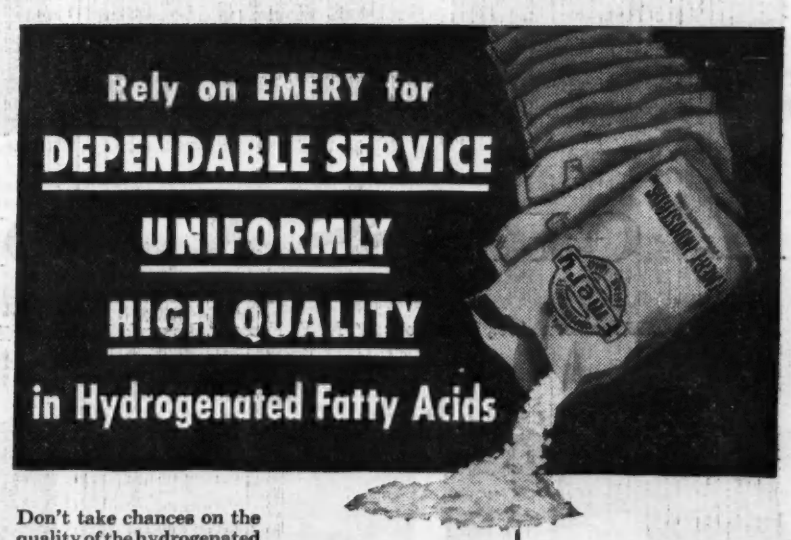

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at New York and Philadelphia last week were as follows:—

	Pounds	
	Beans	Oil
Last week	8,819,250	922,000
Previous week	2,462,850	1,200,000
Corresponding week, 1953	384,900	1,254,450
Total this year	34,562,000	11,554,000
Corresponding period, 1953	51,564,000	46,618,000

Copra—Market held steady. Sales were reported at $172.50 per ton, with c.i.f. Pacific coast, with sellers asking $175.

Fats and Greases

Greases—Moderate trading was reported at slightly lower prices. All grades were reduced ½c. per pound. Yellow grease was sold at 6⅞c. per pound, tankcars, delivered for domestic delivery and 7⅛c. for export. Other grades were inactive. Choice white, not all hog was nominal at 9¼c. per pound, tankcars, delivered. House was quoted at 6⅝c. and brown, 5⅜c., same basis.

Lard—This market fluctuated sharply last week, but closed higher at 19.65c. per pound, drums, Chicago.

Oleo Oil—Offerings were more liberal, covering wide price range, from 19c. to 20¼c. per pound, according to seller and quantity. Oleo stearine was easy and nominal at 14¾c. per pound, barrels.

Tallow—This market easier and off ⅛c. per pound. Soapers took moderate quantities at the decline. Export business was limited and transacted at premiums. Fancy bleachable was quoted at 7⅝c. per pound, tankcars, delivered; extra, 7⅜c.; special, 7⅛c. and No. 1, 7c. per pound, same basis.

Fatty Acids

Business was reported moderate, chiefly for prompt requirements. Oleic and stearic were unchanged and steady. Corn fatty acid was advanced ½c. per pound and cottonseed and soybean 1c. in some quarters, while other sellers maintained former levels.

Cake and Meal

Cottonseed Meal—This market was slightly easier although certain areas had limited offerings. Quotations were more on a local basis which were considerably higher than the general market. Meal forty-one percent was quoted at $67.50 per ton, Memphis, $74, Alabama, $80, and Georgia $85. North Carolina mills for immediate through May shipment. According to the Commodity Stabilization Service, tenders of approximately 498,305 tons of meal and cake have been received by CCC through May 5, 1954. About 113,416 tons of meal and cake were repurchased by the mills at time of tender. The remainder, approximately 25,917 tons, were sold to CCC for future delivery and 358,972 tons were taken into inventory.

Linseed Meal—Market quiet and nominal. Offers for nearby delivery continued scarce.

Minneapolis.—The linseed meal situation was unchanged, with little or nothing offered for balance of May and only small lots offered for June-July positions. Extracted linseed meal, 36 percent protein, was quoted around $80 to $81 a ton, bulk, nominal, in carlots, f.o.b., Minneapolis. Meal for June-July delivery was quoted anywhere from $75 to $78 a ton, bulk, Minneapolis. Expeller meal, 32 percent protein or better, was priced nominally at $85 to $86 a ton, bulk.

Shipments of linseed meal, in pounds, were as follows:—

	1953-54	1952-53
Past week	6,000,000	5,580,000
Since Sept. 1	501,190,000	427,660,000

Peanut Feed Meal—Supplies of peanut feed meal in the southeast were ample with demand rather slow. The government continued to release small quantities of peanuts each week for crushing and most of the sales of meal were to local manufacturers. Old process forty-five percent was available at $92 per ton, sacked, Georgia, and solvent at $88 f.o.b. South Alabama points for immediate through May shipment.

Soybean Meal — General weakness in the soybean market and generally slow mixed feed business resulted in further price declines. Buyers were purchasing supplies as needed. Dried milk solids offered by the government are in the process of being delivered to the feed trade as a replacer for higher vegetable protein meals and it is considered by many that this will tend to hold soybean meal prices from advancing sharply. Meal forty-four percent was quoted at $93 per ton Decatur for immediate, May and June shipment. Some resellers were offering at less, particularly for immediate shipment.

Waxes

Beeswax—Refined grades were firm, reflecting the strength of crude. Trading was light and spotty. Offers of crude for shipment were scarce. African was maintained at 54c. to 56c. per pound, on spot, as to quantity.

Carnauba—Business continued inactive. Prices were unchanged and more or less nominal. No. 3, Ceara, crude was quoted 82c. to 84c. per pound and refined, 84c. to 86c. per pound, according to quantity. No. 1, yellow was easier. Ceara was lower at $1.12 to $1.14 per pound, and Parnahyba, $1.15 to $1.17 per pound, depending upon seller and quantity.

Japan—Stocks were scarce on spot and at primary sources. Spot stocks were maintained at 40c. to 42c. per pound, according to quantity.

Ouricury—Refined was in limited supply on spot and higher. Prices were lifted to 98c. to $1 per pound, as to seller and quantity.

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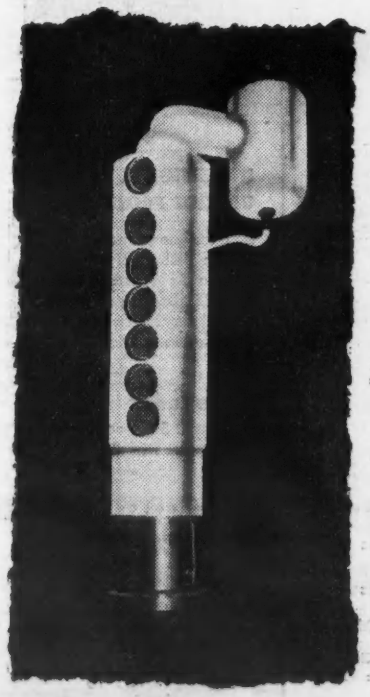

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Petroleum Derivatives

The most important fact affecting the petroleum market was the easy availability of almost all materials. Sales have been quite good so far during the second quarter, but have not strained manufacturers' ability to supply, in most instances. Toluol was in a good supply position, largely because of the greatly diminished purchasing on the part of the government. This situation could change very quickly, however. As yet, industrial users were not buying heavily for inventories, but were content to confine themselves to current requirements. Supplies of xylol were generally ample for the current good demand with prices remaining steady.

Partial aromatics were in good balance. Material has been moving well and manufacturers appeared pretty well satisfied with the current sales picture. Odorless mineral spirits were in very good demand and appeared to be setting new sales records, as well as continuing a steady upturn in demand begun at about the first of the year. The market for aliphatics was not greatly changed. Supplies were moving into consumers' hands at a good rate, but demand was far from taxing manufacturers' ability to ship material.

Domestic and export sales of paraffin and microcrystalline waxes continued at a good pace, taking virtually all of the material currently available. Sales to Mexico and Latin America have taken a good deal of the lower priced grades of waxes. A continued tight supply situation was expected in the wax market. Liquefied petroleum gases remained easy, with sales lowered by a seasonal slump in demand. Petroleum sulfonates moved quite well at unchanged prices. Demand for petrolatums and white mineral oils was good but showed no spectacular changes from levels of the past several months.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 15, 1953
104.75	104.75	105.20	104.50

(For Current Prices see page 9)

Solvents and Diluents

Lacquer Diluent—This market featured a good supply position, as manufacturers kept up to consumer demand without undue difficulty over the past weeks. Sales have been reported off less than had been expected at one time, and in the past thirty days have shown an upward trend. Prices remained steady as previously posted.

Mineral Spirits—Sales in the past week followed the course of the past thirty days, during which time material has moved along fairly well, but has not taxed manufacturers' ability to supply their customers. The specially refined, or "odorless" material, has shown a definite upturn in sales volume during the first quarter of the year, and has continued to move at an increasing rate during the present quarter, trade sources stated. The market for this grade of the material was said to have hit its stride as far as a permanent market was concerned, and a continued good demand for the material was expected in the trade. Prices were steady for both the regular and specially refined grades of the material.

Partial Aromatics — No further price changes developed, following recent reductions by one maker. The supply position assured consumers of ample quantities to fill their requirements, with no pinch in sight. No further price changes were seen in the making, according to sources in the trade. The comfortable supplies, plus the steady demand, made for a fairly well balanced market.

Toluol—With government buying sharply diminished, the supply situation for civilian consumers was quite easy. Material was available without difficulty. Although the situation could change if the government became more active in the market, most industrial users were reported buying for present needs only and not, to any great extent, building up inventories. One major producer planned to shut down one of its plants for the last two weeks in May and the first two in June, in order to change over some of its equipment to gasolene production in addition to toluol and xylol, thus effecting a greater versatility of output. This producer, however, planned to supply all of its customers during that period with shipments of toluol and xylol from stock. Prices remained steady and there appeared to be no movement afoot to make further changes. Recent reductions were localized.

Xylol — The industry's output in the past week continued to prove sufficient for consumers' needs, although there was no great amount of unused material on the market. The current situation was one that was expected to continue without important change in the coming weeks, while prices remained steady. One major producer planned to close one of its xylol and toluol plants for about a month from the middle of May to the middle of June for the purpose of making equipment changes, but expected to fill all orders for xylol during that period from its stocks.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended May 1 totaled 274,003,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 269,647,000 barrels for the preceding week, this represents an increase of 4,356,000 barrels comprising an increase of 5,221,000 barrels in stocks of domestic crude and a decrease of 865,000 barrels in stocks of foreign crude.

Lighter Fractions

LPG's—Propane and butane sales remained easy, in comparison with supplies. Shipments were made without difficulty to those consumers now in the market. A great deal of the usual seasonal slack has set in, and although posted prices were unchanged, summer discounts have been put into effect earlier than usual.

Production of natural gas during 1953 amounted to 9,238,540,000 thousand cubic feet, according to figures released by the American Gas Association and the American Petroleum Institute. This compares with production during 1952 of 8,639,638,000 thousand cubic feet, an increase of 598,902,000 thousand cubic feet. Reserves of natural gas December 31, 1953, totaled 211,447,132,000 thousand cubic feet, an increase of 11,730,907,000 thousand cubic feet during the year.

Waxes

Microcrystalline — Supplies remained snug in a market that had not been oversupplied for quite some time. With production of lubricating oils down, supplies of waxes were necessarily lower than previously, and trade sources stated that no change in this situation could be expected, since an increase in lube oil production could not be effected simply for the sake of the resultant wax production. The projected use of paper containers as a substitute in some uses of metal and glass containers, although still in the experimental stage, offered a possible new and large market for petroleum source waxes.

Paraffin—Export demand has been very good, according to trade sources, particularly to Mexico and Latin America. The lower priced grades of material were reported to be in good demand for export shipment to these countries, largely because of the economic situation there, which required consumers to buy the less expensive grades or none at all. Domestic users maintained an active buying pace. Prices have tended to remain quite steady.

Los Angeles Petroleum Market

Los Angeles.—Little change was reported for solvents and diluents. Sales continued at a good rate with adequate supplies maintained. Prices were unchanged.

Good demand was reported for butane with stocks limited on the local market and quotations unchanged at 6.4c. per gallon, tankcars, f.o.b. Los Angeles. A softer market prevailed in San Joaquin valley areas. Interest in propane continued to follow the normal seasonal pattern with ample supplies reported. Listings were unchanged at 5.9c. per gallon, tankcars, f.o.b. Los Angeles.

For Late Market Developments, See Page 4

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APMA Asks Relief Because Of Mexico's Devalued Peso

Robert A. Hardt, president of the American Pharmaceutical Manufacturers' Association, has written letters to Secretary of State John Foster Dulles and to Secretary of Commerce Sinclair Weeks urging their representations to the Mexican government requesting relief for importers of American pharmaceuticals. These letters read, in part, as follows:—

"Sudden devaluation of the Mexican peso renders most difficult the collection of outstanding bills from Mexican purchasers of pharmaceutical products. Unless the latter are permitted to liquidate current accounts at the old rate of exchange they face destruction of profit margins on recent purchases of these drug products whose prices are locally fixed by Mexican authorities.

"Therefore, the American Pharmaceutical Manufacturers' Association urges your representations to the Mexican government requesting the issuance of a special rule whereby the old rate of exchange is recognized for settlement of bills contracted during the period when the lower rate prevailed. This action will alleviate serious hardships in prospect for Mexican customers, and it is an equitable exception which works no injury to the devaluation plan of the Mexican government."

Roger Williams Engages Willner

Jay R. Willner has joined the staff of Roger Williams Technical & Economic Services, Inc., New York, as a market research analyst. He was formerly with Glidden Company, for whom he did technical service work.

Standard Oil Development Starts Enjay Lab Building

A building to house the newly-created Enjay Laboratories Division and containing eleven laboratories and fourteen offices will be constructed on Standard Oil Development Company's research center ground in Linden, N. J., this year. The division will supply sales technical service in the chemical products field for Enjay Company.

Construction, already under way, is scheduled to be completed by November 1, 1954. The installation is designed to provide the latest equipment for experimentation on petroleum solvents, additives, chemicals and polymers marketed nationally by Enjay. Dr. Miller W. Swaney, formerly assistant director of the development company's chemical division, has been appointed director of the division.

Monsanto's Butyl Benzyl Phthalate Price Cut to 25 Cents Per Pound

Monsanto Chemical Company, St. Louis, Mo., has lowered the price of "Santicizer 160," its butyl benzyl phthalate, 2c. per pound in tankcar quantities, bringing it down to 25c. per pound. Less-than-tankcar prices for the plasticizer are 27c. in truckload and carload drums and 28c. in smaller quantities.

Trade Briefs

Dr. Robert Franklin Prindle has been named Director of Research, Lehn & Fink Products Corporation, New York.

Commercial Solvents Corporation's award for outstanding research in antibiotics has gone to Dr. Rollin D. Hotchkiss.

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2—Industrial Pressure Leaf Filters, Model 2-RDR and Model 3-RDR, both series 30-3630. Each 24 sq. ft., 5 leaf.

1—Baker Perkins "TERMEER" Continuous, all S/S Centrifugal, 12" basket, XP motor, Model S-12.

1—ALL MONEL ENZINGER FILTER: jacket., 24" ID, 8 monel leaves, 75 psi. 38 sq. ft., filtering area.

1—5' dia. x 9'6" Copper Vacuum Pan, C.I. jacket, also steam coils.

1—500 gal. jacketed agit. Steel Kettle, XP motor, 60 psi jacket; heresited.

3—250 gal. Welded Steel Mixers, 42" x 42", heresited interiors.

1—Spencer Turbo Blower, 450 cfm, 8 oz.

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1—#28 Devine Vacuum Shelf Dryer, 20-59"x78" Shelves, pump & condenser.
1—Troy 6"x14" high speed 3-roll mill roller bearing m.d. late type.
1—Shriver 42"x42" Iron Filter Press, plate & frame, 18 chambers, 1" cake.
12—Sperry 18"x18" Iron Filter Presses, 12 chambers.
4—Mikro Pulverizers, 4TH, 2S1, Bantam SH.
7—Pebble Mills, 800 gal., 6'x8'; 235 gal., 5'x4'; 125 gal.; 50 gal.; 25 gal.
1—6'6"x12' Rotary Granulator or Dryer.
3—3'x50' Rotary D. H. Dryers or Coolers.
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3—Anco 4'x9' Chilling Rolls.
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2—Allis Nell 4 x9 Atmos. Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20".
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8—Rotary Dryers Direct & Indirect Also Jacketed & Steam Tube
New Rotary Dryers, Kilns and Coolers

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4—Tolhurst 40" Suspended Type Centrifugals Bottom Discharge.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
11—Sharples No. 9A Stainless Centrifuges. 2 HP. Also Sharples #6.
2—De Laval Multi Clarifiers. 300 & 301.

FILTERS

1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Shriver 30"x30" Iron P&F Filter Press.
10—Sperry and Shriver, 12" 18" 24" 30" & 36" iron Filter Presses, also disc types.
Sweetland & Oliver Vac. Filters.

KETTLES AND TANKS

Dopp 350 gal. Agit. Jack Cl Vac Kettle.
450 gal. closed agit. Steel Kettle.
100 gal. Stainless closed Jack. Agit. Kettle.
Pfaudler 500-gal. vert. Glass Lined Tanks.
2—Impreg. Units 30" & 36" dia., complete.
100 gal. Jack. Impregnating Kettle
500 & 1,000 gal closed Jack. Steel Kettles.
2300 gal. vert. agit. Jack. Steel Kettle.
8—Jack Kettles, 50 to 2500 gals.
1—250 gal. Lead lined Kettle
5—American Tool 300 gal. Churns.
1—250 gal. Jacketed Copper Kettle.
Stainless, alum., copper, Glass lined, lead lined and steel kettles and tanks.
New Stainless Tanks built to order.
Copper & Stainless Varnish Kettles.

PULVERIZERS AND MILLS

Patterson Pebble Mills, 6'x8', 6'x5', 30"x42".
Abbe 24"x33" & 30"x36". Jar Mills.
Abbe 25 gal. steel encased Jar Mill.
#1 Raymond Autom. Pulverizer, 20 HP.
1#00 Raymond Mill 30 H.P. complete.
#0000 Raymond Mills
Williams #3 & 2XX heavy duty Hammer Mills.
Williams 3 Roll Super Titan Roller Mill.
Ball & Jewell #1 Rotary Cutter.
Buchanan 12"x12" Jaw Crusher.
Hammer Mills & Pulverizers, to 50 HP
1—Sturtevant 42" Rock Emery Mill.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9"x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill. 3 pr high Also 7½x20, 4 Roll.
1—9"x24" 1 Pr High Steel Roller Mill
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U S & Premier 1½ H.P Colloid Mills.

MIXERS, SIFTERS & SCREENS

Baker Perkins double arm Mixers, 100, 50 & 9 gal. Also single arm Mixers.
Century 40 & 80 qt. vert. 4 speed Mixer.
Tyler 3'x3' Vibratory 2 deck Screen.
Patterson 3½' dia. Stainless Conical Blender.
1—Master Drum type 1000# Blender
Day 1000# Steel Powder Mixer M.D.
10—Dry Powder Mixers, 50 to 3,000 #.
4—Day 2½, 8, 15 & 40 gal. Pony Mixers.
1—Ross type 150 gal. change Can Mixer.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS

Stokes #280, 4" dia. Preform Machine.
Sperry 36" sq. iron Filter Presses.
Anderson & French Oil Expellers.
Sly Dust Collector, 242 sq. ft., complete.
3—Buffalo Horiz. Vac. Pumps, 5 H.P.
5—Stokes & Colton Rotary and Single Punch Tablet Machines, ⅛ to 4".
Kane 2 H.P. Gas Boilers, 200# pressure.
1—Knapp Model S Can Labeler M.D.
3—Stokes and Day Powder Fillers.
Samco Jr. Vac. liquid Filling Machine.
Filling Machines & Labelers.
Pneumatic Scale Automatic Capper.
1—Howe Mogul barrel and bag packers.
2—Revolving Pans, 30" & 36" dia.
1—Gould 75 HP 2 stage centrif. Pump.
2—Worth 12"x12"x12" Vac. Pumps
8—Devine, Buffalo, Stokes Vac. Pumps.
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Stokes Model 90D auto. tube filler—MD.
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2500 gal. heavy duty steel agtd. reactor.
Mikro Pulverizer No. 1—SH—5 H.P. MD.
Ball & Jewell No. 1 rotary cutter.

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NEW DRY MIXERS—100-200-600-pound capacity Steel Spiral—Center discharge.
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PUMPS CENTRIFUGAL—s/s—Rubber C.I. w/motors; many sizes.
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1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
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1—Copper Evaporator, steam jacketed, 9'1"x3'9".
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Davenport Rotary Steam Tube Dryer, 6'x36'.
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2—Stainless Steel Steam Jacketed Readco Mixers.
1—#316 Stainless Reactor, 265 gals. cap., jacketed.
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SPECIAL
2—New RANSOME ROTATING DRUM MIXERS 9' dia. x 11'6".
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Two 10,000 gal. Steel Mixing Tanks w/Turbo Agitators and Drives.

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★ Lancaster Stainless Lined Rotary Reactor Jacketed for 150 PSI and Internal Pressure 300 PSI; 50" x 17'.

★ Baker Perkins Type 316 Stainless Ter-Meer Continuous Centrifuge No. S12 with 7½ H.P. AC motor.

★ Lancaster MixMuller Model EAG4 complete with hoist and all accessories; 10 H.P. AC motor.

★ Readco 210 Gal. Jacketed Double Ribbon Mixer; extra heavy; 30" x 33" x 68".

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1—500 gal. W & P sigma-blade jacketed mixer.

1—Stainless steel Sprout-Waldron 1000# jacketed mixer.

30—Filter presses, Shriver, Sperry and Independent 7" up to 48", iron, bronze, lead, aluminum and stainless.

1—Haveg 1000 gal. tank.

1—Stainless clad 2200 gal. jacketed tank.

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KETTLES: 1—450 Gal. Stainless steel jacketed agitated, with Reflux Condenser; 1—Pfaudler 200 Gal. closed jacketed, 75 psi; 1—750 Gal. copper closed jacketed; 1—574 Gal. jacketed agitated steel, 60 psi.

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2—Baker Perkins Termeer, S-12-SB, used 3 months, 1953.

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$30,000.00 of Miscellaneous Hardware, Accessories, Supplies

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OFFICE EQUIPMENT: 1250 Multilith, Baum Folder, Checkwriter, Time Punch, Addressograph, Adding Machine, Postal Scale, Graphotype, m.d., Monroe Calculator, Typewriters.

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Individual with capital seeks associate with equal capital and technical knowledge preferably in distillation, hydrolysis, etc., for research and utilization of various by-products. OPD 341.

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For Sale: Stainless steel rotary dryer link belt, 5'2"x16'. No. 502-16, with all auxiliary equipment, Roto Lourve type. OPD 349.

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Chemical Equipment wanted for defense plant work including autoclave centrifuges, dryers, filters, kettles, mixers, pulverizers and tanks. Also interested in set-up plants, now operating or idle. Give full particulars in first letter for consideration. OPD 339.

Wanted—Send us your list of surplus or idle machinery. Interested in large capacity dry & wet Mixers Rotary and batch Dryers. Pulverizers, all kinds of Jacketed Kettles. Distilling apparatus Filling and Packaging Units, Stainless steel and non-corrosive Tanks and Vessels For 36 years we have been buying from single items to complete plants. Consolidated Products Co., Inc., 60 Bloomfield Street, Hoboken, New Jersey. HO 3-4425., N. Y. Phone BA 7-0600.

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Wanted: Baker Perkins Unidor Mixer 500 gallons or more working capacity. Advise model number, description, condition, location, and price. OPD 356.

Horizontal dry batch mixer, dust tight, mild steel construction, center line double ribbon agitator, center discharge gate capacity 74 to 92 cubic feet swept volume, complete with drive. Address all details with dimensions to Verona Chemical Co., 26 Verona Avenue, Newark 4, New Jersey.

Pilot Plant and full scale chemical plant equipment required for large expansion program. Kettles, columns, heat exchangers, tanks, mixers, dryers, centrifuges, pumps, filters, screens, pulverizers, etc. Stainless Steel alloy equipment preferred. Complete plants given immediate study. OPD 340.

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A sulfonator of oils would like to act as a manufacturing department for one who has control of or offers good volume of business. Address OPD 359.

Complete process for production of 8-Hydroxyquinoline by sulfonation. For further information write OPD 360.

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We offer, subject to prior sale, 7 bbls. (approx. 3,027 lbs.) Sulfonated Tallow 75% at 7½c per lb. FOB Elizabethport, barrels inclusive. Sample available. Address OPD 357.

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Minnesota Company, well established and adequately financed, with warehouse and trackage facilities, is interested in obtaining distributorship for State of Minnesota and adjoining states, on chemical products sold to industrial plants, oil burner dealers, dairies, and fuel oil dealers. OPD 342.

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Scales: Hopper batch type, 500, 1000, 2000#.
Hammer Mills: Williams, Mikro, Prater.
Vac. Drum Dryer: Devine 2x4', st. steel.
Pressure Tank 8x40', 125 psi., ASME.
Kettles: st. steel agit., 50 and 150 gal.
Rotary Cutter: Ball & Jewell #1½, 20 hp.
Clarifiers: De Laval 84-S1 motor dr.
Press: Davenport 3-A, Durimet con.
Mixer: Simpson 36" intensive.
Powder Mixers: 100 to 2,000 lbs.
Filter Presses: 7" to 24", Sperry, Shriver.
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Pesticide Supply Seen

—Continued from page 3

Service. The report reviewed last year's production of each of the major pesticides with comparisons for earlier years, as well as developments in the field of fungicides and weed killers.

Pesticide Needs Estimated

The report contained the following estimate of requirements for major pesticides for the 1953-54 season in thousands of pounds:—

Benzene hexachloride[1]	8,000-11,000
Calcium arsenate	8,000-20,000
Chloro IPC	1,000-1,500
Copper sulfate[2]	100,000-125,000
2,4-D (acid basis)	26,000-28,000
DDT	60,000-80,000
Lead arsenate	16,000-30,000
Parathion	3,000-4,000
Pyrethrum (flowers)[3]	7,000-8,000
Rotenone (roots)[3]	4,000-5,000
Sulfur, ground[3]	300,000-400,000
2,4,5-T (acid basis)	4,000-5,000
Tetraethyl pyrophosphate	350-500

[1] Gamma isomer basis; includes lindane.
[2] For all domestic uses, including industrial; calendar year basis.
[3] Imports; includes advanced (powdered).

The report said that the diversion of acreage in 1954 to crops other than cotton, wheat, and corn is likely to affect pesticide consumption locally, but from the overall viewpoint, it can be said that weather often influences infestations much more than could the proposed acreage shifts, especially in the case of the cotton crop. Some crops planted on diverted acres will themselves require application of chemicals. Likely some growers will use more pesticides per acre on the reduced acreage allotment in an attempt to increase their rate of production. Thus, the effect of reduction in acreage on pesticide consumption will be offset to an appreciable extent, he was stated.

It was also predicted that new uses for certain established pesticides will absorb a significant volume of materials in 1954, and a variety of promising new chemicals, especially organic phosphorus compounds will receive widespread field use on an experimental and semi-commercial scale.

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FTC Revamps Machinery

—Continued from page 3

spondent is entitled to an unequivocal and detailed exoneration . . . It is important that the business world know what it may do, as well as what it may not do."

Mr. Howrey hailed the commission's decision to write an opinion in every case as "probably the most important single step which the commission could take toward enhancing the value and authority of its decisions and in providing for a remedy adequate in form and scope." He said:—

"The commission deals with matters of vital importance to business. Many of the questions which come before it relate to controversies of long standing which are debated at conventions and in trade journals. If the commission were to issue in all such cases an informative and readable opinion, they would have an influence far beyond the immediate controversy."

In calling for hearing examiners to abandon "formal and legalistic findings" and to adopt instead "narrative and descriptive reports," Mr. Howrey pointed out, "Where an examiner must review the evidence presented by both sides, analyze and dispose of arguments, give convincing reasons for his decision and distinguish or reconcile the precedents, and then apply the proper remedy, he is much more likely to reach a just and well-considered conclusion than if he is permitted merely to state in legal phraseology his ultimate findings of fact and law."

Mathieson, Olin Plan Merger

—Continued from page 5

operations are world-wide and include twenty-five plants in the United States and sixteen in foreign countries.

Olin Industries is a producer of metals and fabricated parts, industrial explosives, military and sporting firearms and ammunition, cellophane, polyethylene, fine specialty papers, forest products, powder-actuated fasteners and tools, and electrical products. It maintains a large research staff to develop new and improved products. Olin operates eighteen plants, all in the United States.

The proposal to merge Mathieson and Olin is the result of negotiations and studies by the boards of directors and managements of both corporations. Each of the corporations has, since World War II, engaged in a program of expansion and diversification along traditional lines of its own business or in lines closely and naturally related to its own business. In June, 1953, Mathieson and Olin entered into an agreement to form the jointly-owned Matholin Corporation to manufacture, sell and conduct research on hydrazine, a new industrial chemical of great promise.

Interhandel Seeks Trial

—Continued from page 4

which was in itself unlawful and invalid. Furthermore, it was added, the government did not have a right to the Struzenegger records to prepare its defense and it was not shown, nor could it be inferred, that the records contained evidence favorable to the government's allegation.

The brief said that the federal rules of civil procedure predicate the power of the courts to enter sanctions for failure to comply with an order upon "refusal to obey" an order. Interhandel never refused to obey the order, but was unable to comply, it was stated. Consequently, it was added, dismissal of the case "was a denial of due process of law, as was the lower court's refusal to consider conclusive rebuttal evidence ruling out any bad faith" on the part of Interhandel.

BDSA Copper Job to Snow

David F. Snow, of Bridgeport Brass Company, Bridgeport, Conn., has been appointed director of the copper division of the Business and Defense Services Administration. Mr. Snow succeeds Marvin A. Joy, of Chase Brass & Copper Company, Waterbury, Conn. Mr. Snow is on loan to BDSA and will serve as director of the division for about six months as part of the industry rotation system employed by BDSA.

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Monsanto Promotes Two, Develops Vinyl Paste Resin

Monsanto Chemical Company, St. Louis, Mo., has named John A. Sherred director of research development for its plastics division, and at the same time has told of the appointment of J. V. Cavender as group leader in its research department and the development of a stir-in type vinyl paste resin.

Mr. Sherred joined the company in 1947 at its Texas City, Tex., plant. Since 1952 he has been in charge of development functions in the research department at that site. Mr. Cavender joined the company in 1948 as a research chemist in the research laboratory of its organic chemicals division in St. Louis, and transferred to Texas City in 1951.

Monsanto's new resin paste, which is reported to have uses in textile and paper coatings, slush molding and dripping, will be designated "Opalon 410." It is said to have excellent dispersion characteristics and to blend quickly and easily with plasticizers.

Vinyl Films Standard Data Offered By Society of the Plastics Industry

The vinyl standards educational committee of the Society of the Plastics Industry has prepared a brochure which outlines the benefits of participating in the vinyl films standards-of-quality promotional program. The brochure lists the benefits to be derived from promoting sales of film meeting the new industry standard, commercial standard C. S. 192-53, as accepted by the Department of Commerce. A text of the shortened version of these standards is included. Copies of the brochure and a retail handbook can be obtained from the society at 67 West 44th street, New York 36.

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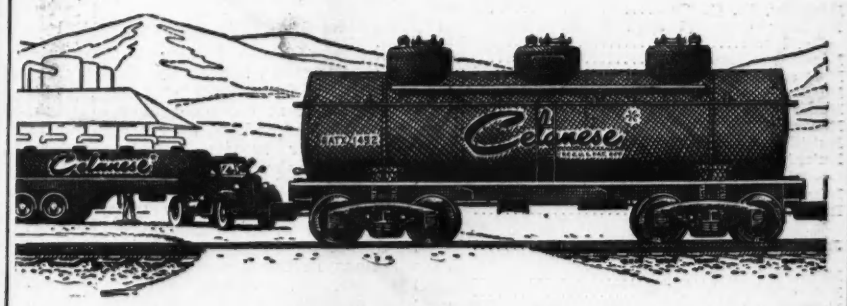

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